UIC- I - ___005___

ANNUAL REPORTS (2)

2009

APPENDIX E

2009 Daily Log Sheets

AUG 2176 JAN 09 -

11 89 READINGS 138,000 HRS

	PRESSURE	METER	HOUR RATE
1-22-09			
2PM	2250	35882	190.6
3 PM	2300	36072	190
4 PM	2300	36258	186
5 PM	2300	36455	197
6 PM	2300	36627	172
11 PM	2250	36627	0
12 PM	2250	36809	182
1-23-09			
1AM	2300	37008	199
2 AM	2300	37208	200
3 AM	2300	37406	198
4AM	2300	37578	172
5AM	2300	37750	172
6AM	2325	37921	171
7 AM	2325	38114	193
8 AM	2350	38294	180
9AM	2350	38490	196
10 AM	2350	38657	167
1-25-09			
7AM	2100	38657	0
8 AM	2150	38868	211
9AM	2200	39076	208
10 AM	2200	39276	200
11 AM	2250	39488	212
12AM	2250	39686	198
1PM	2250	39892	206
2PM	2250	40095	203
3PM	2275	40300	205
4PM	2400	40501	201

	PRESSURE	METER	HOUR RATE
1-25-09			
5 PM	2300	40906	205
6 PM	2300	40909	203
7 PM	2300	41116	207
1-26-09			
7PM	2100	41116	0
8PM	2150	41300	184
9PM	2200	41483	183
10PM	2250	41672	187
11PM	2275	41860	188
12PM	2275	42047	187
1-27-09			
1AM	2275	42233	186
2AM	2275	42424	191
3AM	2300	42609	185
4AM	2300	42796	187
5AM	2300	42980	184
6AM	2300	43168	188
7AM	2300	43361	193
8PM	2100	43361	0
9PM	2100		
10PM	2200	43549	188
11PM	2250	43732	182
12PM	2250	43913	181
1-28-09			
1AM	2275	44099	186
2AM	2275	44278	179
3AM	2300	44462	184
4AM	2300	44640	178

	Pressure	Meter	Hour Rate
1-28-09			
~~5AM~~	~~2300~~	~~44822~~	~~182~~
6AM	2300	45003	181
7AM	2300	45184	181
1-29-09			
1AM	2100	48184	0
2AM	2200	45371	187
3AM	2200	45556	185
4AM	2225	45743	189
5AM	2250	45925	182
6AM	2275	46108	183
9PM	2100	46108	0
10	2200	46416	208
11PM	2250	46627	211
12PM	2250	46803	209
1-30-09			
1AM	2250	47050	214
2AM	2250	47252	202
3AM	2250	47464	212
4AM	2275	47668	204
5AM	2300	47876	208
6AM	2300	48074	198
4PM	2250	48074	0
5PM	2250	48287	213
6PM	2000	48516	229
7PM	1950	48716	200
8PM	1900	48950	234
9PM	1850	49162	212
10PM	1800	49379	217
11PM	1800	49592	213
12PM	1800	49806	214

	Pressure	Meter	Hour Rate
1-31-04			
1AM	1775	50020	214
2AM	1775	50235	215
3AM	1775	50446	211
4AM	1750	50656	210
5AM	1750	50870	214
6AM	1725	51086	216
7AM	1725	51294	208
8AM	1725	51514	220
9AM	1800	51717	203
2-1-04			
2AM	2150	0	0
3	2200	223	223
4AM	2250	424	201
5AM	2250	631	207
6AM	2300	836	205
7AM	1600	1052	216
2-2-04			
7PM	2000	1052	0
8PM	2150	1229	177
9PM	2200	1399	170
10PM	2200	1598	199
11PM	2200	1809	211
12PM	2250	1998	189
2-3-04			
1AM	2250	2203	205
2AM	2300	2406	203
3AM	2300	2613	207
4AM	2300	2797	200

	PRESSURE	METER	HOUR RATE
1-31-09			
1AM	1795	50020	214
2AM	1775	50235	215
3AM	1775	50446	211
4AM	1750	50656	210
5AM	1750	50870	214
6AM	1725	51086	216
7AM	1725	51294	208
8AM	1725	51514	220
9AM	1800	51717	203
2-1-09			
2AM	2150	0	0
3	2200	223	223
4AM	2250	424	201
5AM	2250	631	207
6AM	2300	836	205
7AM	1600	1052	216
2-2-09			
7 PM	2000	1052	0
8 PM	2150	1229	177
9 PM	2200	1399	170
10 PM	2200	1598	199
11 PM	2200	1809	211
12 PM	2250	1998	189
2-3-09			
1AM	2250	2203	205
2AM	2300	2406	203
3AM	2300	2613	207
4AM	2300	2797	200

FEB 09

MAX 2400

AVG 2200

11 READINGS 211

PRES 464,170

	PRESSURE	METER	HR
2-3-09			
5AM	2300	2997	2
6AM	2300	3193	19
7AM	2300	3394	20
8AM	2300	3594	20
9PM	2150	3594	0
10PM	2200	3780	186
11PM	2200	3975	195
12PM	2200	4168	193
2-4-09			
1AM	2250	4362	19
2AM	2250	4555	193
3	2300	4749	194
4AM	2300	4945	196
11PM	2100	4945	0
12PM	2150	5146	201
2-5-09			
1AM	2200	5337	191
2AM	2200	5529	192
3AM	2250	5720	191
4AM	2250	5912	192
5AM	2275	6102	190
6AM	2300	6294	192
2-6-09			
1PM	2100	6294	0
2	2150	6497	203
3PM	2175	6687	190
4PM	2225	6876	189
5PM	2250	7066	190
6PM	2275	7256	190

	Pressure	Meter	Hour R.
2-7-09			
~~1AM~~	~~2075~~	~~7256~~	~~0~~
2AM	2150	7442	186
3AM	2175	7635	193
4AM	2200	7822	187
5AM	2225	8014	192
6AM	2250	8204	19[illegible]
10PM	2100	8204	0
11PM	2150	8392	18[illegible]
12PM	2175	8581	189
2-8-09			
1AM	2200	8765	184
[illegible]	2200	8949	184
3AM	2225	9130	181
4AM	2250	9313	183
5AM	2250	9496	183
6AM	2250	9679	183
7AM	2300	9868	189
8AM	2300	10056	188
9AM	2300	10264	208
10AM	200	10437	173
9PM	2100	10437	0
10PM	2175	10619	182
11PM	2200	10804	18[illegible]
12PM	2200	10984	18[illegible]
2-9-09			
[illegible]AM	2250	11168	18[illegible]
2AM	2250	11351	18[illegible]
3AM	2250	11531	18[illegible]
4AM	2250 69✓	11711	180

	Pressure	Meter	Hour Rate
2-9-09			
5AM	2275	11892	181
6AM	2275	12094	182
9PM	2100	12074	0
10PM	2150	12256	182
11PM	2200	12433	177
12PM	2200	12611	178
2-10-09			
1AM	2200	12790	179
2AM	2225	12971	181
3AM	2250	13146	175
4AM	2250	13324	178
5	2250	13503	177
6AM	2250	13680	177
3PM	2250	13680	0
5PM	2200	14055	188
6PM	2200	14241	186
2-11-09			
11AM	1800	14241	0
12AM	2200	14385	144
1PM	2200	14551	166
2PM	2200	14731	180
3PM	2250	14886	155
4PM	2150	15053	167
5PM	2150	15232	179
6PM	2150	15384	152
7PM	2150 93	15552	168

	PRESSURE	METER	HOUR RATE
2-12-09			
~~11AM~~	~~2150~~	15552	0
12AM	2150	15702	150
1PM	2150	15861	160
2PM	2150	16030	170
3PM	2200	16193	163
4PM	2200	16368	175
5PM	2200	16526	158
6PM	2200	16687	161
7PM	2200	16839	152
11PM	2150	16839	0
12PM	2150	17054	215
2-13-09			
1AM	2150	17216	162
2AM	2200	17379	163
3AM	2200	17548	169
4AM	2200	17708	162
5AM	2225	17869	161
6AM	2225	18036	167
7AM	2200	18197	161
2-14-09			
11AM	2100	18197	0
12AM	2100	18360	160
1PM	2150	18527	171
2PM	2175	18696	166
3PM	2200	18895	168
4	2200	19054	172
5PM	2200	19230	171
6PM	2200	19406	176
~~7PM~~	~~2175~~ NO		

119

	PRESSURE	METER	HOUR RATE
2-15-09			
~~11am~~	~~2025~~	~~19406~~	~~0~~
12PM	2100	19566	160
1PM	2100	19737	171
2PM	2150	19903	166
3PM	2150	20071	168
4PM	2160	20243	172
5PM	2160	20414	171
6PM	2175	20579	165
7PM	2175	20750	171
2-16-09			
4:30PM	2000	20750	0
5:30	2300	20958	208
6:30pm	2350	21187	229
7:30PM	2350	21389	202
2-17-09			
12PM	2300	21602	213
1PM	2350	21806	204
2PM	2400	22020	214
3PM	2400	22216	196
4PM	2400	22407	191
5PM	2400	22618	211
6PM	2400	22855	237
7PM	2400	23045	190

	Pressure	Meter	Hour Rate
2-18-09			
9AM	2250	23045	0
10AM	2350	23264	219
11AM	2350	23483	219
12AM	2350	23691	208
1pm	2400	23900	208
2pm	2400	24100	200
3pm	2400	24300	200
4.	Ø	Ø.	Ø
530pm	2400	24300	Ø
630pm	2400	24521	221
730pm	2400	24738	217
2-19-09			
10AM	2200	24938	0
11AM	2250	24924	186
12AM	2300	25122	198
1PM	2350	25338	216
2PM	2350	25538	200
3PM	2350	25729	191
4PM	2400	25940	211
5PM	2400	26140	200
6PM	2400	26340	200
7PM	2400	26555	215
2-20-09			
02-21-09			
9AM	2200	26752	197
10AM	2250	26950	198
11AM	2300	27150	200
12pm	2325	27353	203
1PM	2325	27547	194
2PM	2350	27746	199

-21-09	Pressure	Meter	Hour Rate
3PM	2375	27,942	196
~~4PM~~	~~2375~~	~~28,146~~	~~204~~
5PM	2400	28,343	197
6PM	2400	28,539	196
7PM			

2-24-09

10AM	1600	28,539	0
11AM	2200	28,775	236
12AM	2300	28,975	200
1pm	2300	29180	205
2PM	2325	29386	205
3PM	2300	29590	204
4pm	2325	29793	203
5pm	2325	29995	202
6pm	2325	30185	190
7pm	2325	30402	217

2-25-09

1 PM	1800	30402	0
2 PM	2200	30594	192
3 PM	2250	30788	194
4 PM	2250	30980	192
5 PM	2300	31177	197
6 PM	2300	31362	185
7 PM	2300	31554	192

185 ✓

	PRESSURE	METER	HOUR RA
2-26-09			
1pm	~~1800~~	~~31554~~	~~0~~
2pm	2100	31748	194
3pm	2200	31960	212
4pm	2200	32157	197
5pm	2200	32355	198
6pm	2200	32556	201
7pm	2200	32757	201
2-27-09			
10AM	1800	32757	0
11AM	2200	32954	197
12N	0 REPLACE STUFF BOX 2	0	0
1pm	2200	32954	0
2pm	2125	33154	200
3pm	2150	33320	166
4pm	2175	33480	160
5pm	2175	33638	155
6pm :30			
7pm		33856	221
02-28-09			
12NOON	2100	34018	162
1 PM	2150	34181	163
2PM	2150	34338	157
3PM	2175	34491	153
4PM	2200	34647	156
5PM	2200	34801	154
6PM	2200	34954	153
7PM	2200 211	35107	153

	Pressure	Meter		Hourly
03-01-09		~~0~~		
~~1PM~~	~~2100~~	~~150~~		~~150~~
2PM	2150	297	MAX 2400	147
3PM	2150	443		146
4PM	2200	599	AVG 2243	156
5PM	2200	751	# READINGS 158	152
6PM	2200	911	PRL 5 354,375	160
~~7PM~~	~~2100~~	~~1228~~		
03-0209		1063		
1PM	2100	1228		165
2PM	2150	1395		167
3PM	2175	1551		156
4PM	2175	1717		166
5PM	2175	1878		161
6PM	2200	2040		162
7PM	2200	2201		161
3-3-09				
10AM	1800	2201		0
11AM	2100	2359		158
12AM	2300	2525		166
1PM	2300	2723		198
2PM	2350	2907		184
3PM	1950	3097		190

MAX

AVG

	Pressure	Meter	Hour
3-6-09			
10 AM	2050	3097	0
11 AM	2200	3266	169
12 AM	2200	3440	174
1 PM	2200	3622	182
2 PM	2250	3810	188
3 PM	2300	4000	190
4 PM	2300	4183	183
5 PM	2300	4360	177
6 PM	2300	4540	180
7 PM	2300	4718	178
8 PM	2325	4897	179
9 PM	2325	5075	178
10 PM	2325	5256	181
11 PM	2325	5435	179
12 AM	2325	5573	138
		~~5760~~	
03-07-09			
7 AM	2300	5760	187
8 AM	2300	5941	181
9 AM	2350	6126	185
10 AM	2350	6305	179
11 AM	2350	6492	187
12 PM	2350	6677	185
1 PM	2350	6853	176
2 PM	2350	7038	185
3 PM	2350	7216	178
4 PM	2350	7415	199
5 PM	2350	7575	160
6 PM	2350	7755	180
7 PM	2350 48 ✓	7937	182

	Pressure	Meter	Hour Rate
-08-09	?	7937	0
9AM	2250	8137	200
10AM	2300	8322	185
11AM	2300	8510	188
12PM	2325	8693	183
1PM	2350	8868	175
2PM	2350	9057	189
3PM	2300	9222	165
4PM	2300	9388	166
5PM			
6PM			
7PM			
-10 09			
12AM	2250	9388	0
1pm	2100	9530	142
2PM	2100	9690	160
3pm	2100	9848	158
4pm	2100	10,000	152
5pm	2150	10,150	150
6pm	2100	10,300	150
3-11-09			
12AM	2000	10,300	0
1pm	2100	10,440	140
2pm	2100	10,585	145
3pm	2100	10,730	145
4pm	2100	10,875	145
5pm	2100	11,021	146
6pm	2150	11,160	139
7pm	2150 71	11,303	143

	Pressure	Meter	Hour R.
3-12			
~~12 pm~~	~~2000~~	~~11,303~~	~~0~~
1 pm	2000	11,422	119
2 pm	2050	11,560	138
3 pm	2100	11,700	140
4 pm	2100	11,835	135
5 pm	2150	11,975	140
6 pm	2150	12,118	143
7 pm	2150	12,255	137
8 pm	2150	12,392	137
9 pm	2150	12,528	136
3-13			
9 am	2000	12,528	0
10 am	2250	12658	130
11 am	2300	12842	184
12 pm	2350	13,033	191
1 pm	2350	13216	183
2 pm	2375	13,300 DOWN	84
3 pm	2300	13495	195
4 pm	2400	13683	188
5 pm	2400	13867	184
6 pm	2400	14052	185
7 pm	2400	14238	186
-14 2 pm	2275	14432	194
3 pm	2325	14627	195
4 pm	2350	14823	196
5 pm	2350	15019	196
6 pm	2350	15215	196
7 pm	2350	15397	182

	Pressure	Meter	BBL R
	03-15-09		
9AM	2250	15591	194
10AM	2300	15777	186
11AM	2325	15970	193
12PM	2350	16146	176
1PM	2350	16335	189
2PM	2350	16519	184
3PM	2400	16701	182
4PM	2400	~~16857~~ 16857	156
5PM			
6PM			
7PM			

	3-18-09		
9Am	1650	16857	0
10Am	1650	16862	shut pump off 10am 5
11Am			

	3-19-09	16862	0
1:30pm	2200	17020	158
2:30pm	2250	17220	200
3:30pm	2300	17417	197
4:30pm	2325	17615	198
5:30pm	2325	17805	190
6:30pm	2325	17996	191
7:30pm	2325	18189	193

	Pressure	Meter	Hour
03-20			
9am	2300	18189	~~[illegible]~~
10Am	2300	18390	20
11Am	2325	18585	19
12pm	2350	18779	19
1pm	2375	18977	198
2pm	2375	19184	207
3pm	2400	19393	209
4pm	2400	19601	208
5pm	2400	19808	207
03-21-09			
1:00PM	2300	20026	218
2PM	2350	20204	178
3PM	2350	20384	180
4PM	2350	20623	239
5PM	2350	20828	205
03-23-09			
2AM	2200	21032	204
3AM	2250	21232	200
4AM	2300	21432	200
5AM	2325	21630	198
03-24-09			
1pm	2200	21630	~~0~~
2pm	2250	21836	206
3pm	2275	22033	197
4pm	2300	22192	160

137V

	Pressure	Meter	Hour
03-26-09			
9Am	2100	22192	0
10Am	2200	22402	210
11Am	2250	22595	193
12pm	2300	22781	186
1pm	2300	22972	191
2pm	2300	23161	189
03-28-09			
1PM	2150	23308	147
2AM	1700	23433	125
3:30PM	2250	23622	189
4:30PM	2275	23821	199
5:00PM	2300	24015	194
6:30	2300	24208	193
7:30	2300	24401	193
03-30-09			
12PM	2200	24596	195
1PM	2250	24792	196
2PM	2300	24992	200
3PM	2300	25188	196
4PM	2300	25384	196
5PM	2350	25583	199
6PM	2350	25787	204
7:AM	2350	25999	212
04-1-09 ~~2100~~			
10Am	2100	0	0
11Am	2200	205	205
12PM	2300	395	190
1pm	2300	585	190
2pm	2300	776	191

	Pressure	Meter	Hour
03-26-09			
9Am	2100	22192	e
10Am	2200	22402	21[illegible]
11Am	2250	22595	19[illegible]
12pm	2300	22781	186
1pm	2300	22972	191
2pm	2300	23161	189
03-28-09			
1PM	2150	23308	147
2PM	1700	23433	125
3:30PM	2250	23622	189
4:30PM	2275	23821	199
5:[illegible]PM	2300	24015	174
6:30	2300	24208	173
7:30	2300	24401	193
03-30-09			
12PM	2200	24596	195
1PM	2250	24792	196
2PM	2300	24992	200
3PM	2300	25188	196
4PM	2300	25384	19[illegible]
5PM	2350	25583	199
6PM	2350	25787	20[illegible]
7:PM	2350	25999	212
04-1-09 ~~2100~~	MAX 2300	0	APR 09 0
10Am	2100		
11Am	2200	205	205
12PM	2300	395	190
1pm	2300	585	190
2pm	2300	776	191

AVG 2189

HOURS 89

PRES 194,800

	Pressure	Meter	Hour Rate
04-1-09 (2pm)	2300	776	191
3pm	2300	970	194
4pm	2300	1160	190
5pm	2300	1358	198
04-2-09	0	0	0
04-3-09 8pm	0	1358	0
9Am	2200	1560	202
10Am	2200	1750	190
11Am	2250	1950	200
12:pm	2300	2138	188
shut of @ 12:15 Tanks at Fire feet.			2[illegible]
12:15	2300	2183	45
04-4-09			
4-5-09 4pm	2000	2183	0
5pm	2150	2382	199
6pm	2200	2571	189
7pm	2250	2769	198
04-07-09			
1PM	2150	2966	197
2PM	2200	3164	198
3PM	2200	3368	204
4PM	2250	3564	196
5PM	2250	3772	208
6 PM	2300	3969	197
04-08-09	0	0	0

	Pressure	Meter	Hour
04-09-09			
11am	2000	3973	0
12PM	2150	4140	167
1pm	2200	4375	23[illegible]
2pm	2200	4586	211
3pm	2250	4780	194
4pm	2300	4947	167
5pm	2300	5152	205
6pm	2300	5349	197
7pm	2300	5531	182
8pm	2300	5719	188
04-12-09			
	0	0	0
10 AM	2100	5915	196
11 AM	2200	6112	197
12 PM	2200	6291	179
1 PM	2250	6479	188
2 PM	2250	6666	187
3 PM			
4 PM			
04-13-09			
2:30PM	2150	6860	194
3:30PM	2200	7054	194
4:30PM	2250	7248	194
5:30PM	2250	7439	191
6:30PM	2250	7626	187
7:30 PM	2250 45	7817	191

		METER	BBLS
04-14-09			
9AM	2000	7817	0
~~10AM~~	~~2200~~	~~8015~~	~~19~~
11AM	2200	8202	187
12 pm	2200	8387	185
1pm			
04-16-09			
12:1	2000	8387	0
12pm	2150	8572	185
1pm	2200	8763	191
2pm	2200	8952	189
3pm	2250	9141	189
4pm	2250	9332	191
5pm			
04-18-09			
11:30AM	2100	9522	19
12:30PM		0	0
1:30PM	2150	9742	220
2:30PM	2150	9938	196
3:30PM	2200	10134	196
4:30PM	2250	10328	194
5:30PM	1800	10524	196
04-19-09			
2:30 PM	2150	10730	206
3:30 PM	2200	10922	192
4:30PM	2200	11114	192
5:30 PM		11304	190

	Pressure	11,304 Meter	BBLs pe
10:30 AM	2050	11503	199
11:30 AM	2100	11702	199
12:30 AM	2200	11901	199
1:30 PM			

04-21-09

2 PM	2150	12101	200
3 PM	2200	12300	200
4 PM	2250	12496	195
5 PM	1700	12693	197

04-23-09

1pm	2000	12693	0
2pm	2100	12887	194
3pm	2150	13081	194
4pm	2200	13274	193
5pm	2200	13466	192
6pm	2000	13660	194

04-25-09

10AM	2100	13858	198
11AM	2150	14051	193
12PM	2200	14,244	193
1 PM	2250	14,438	194
2 PM	2250	14630	192
3 PM	2275	14822	192
4 PM	2275	15015	193

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	Pressure		Meter	BBLs per
04-28-09				
10 AM	2100		15223	208
11 AM	2150		15420	197
12 PM	2200		15619	199
1 PM	2200		15816	197
2 PM	2250	89	16016	200
3 PM				

05-01-09				
10 AM	1900		190	190
11 AM	1950		380	190
12 PM	2000		570	190
1 PM	2100		760	190
2 PM	2200		953	193
3 PM	2250		1150	197
4 PM	2250		1341	191
5 PM	2250		1536	195
6 PM			1734	198

NC

05-04-09			~~1928~~	
1 PM	2050		1928	194
2 PM				
3 PM	2150		2200	
4 PM	2200		2392	192
5 PM	2200		2584	192
6 PM			2777	193

Pressure		Meter	BBLs per
04-28-09			
10 AM	2100	15223	208
11 AM	2150	15420	197
12 AM	2200	15619	199
1 PM	2200	15816	197
2 PM	2250	16016	200
3 PM			
05-01-09			
10 AM	1900	190	190
11 AM	1950	380	190
12 PM	2000	570	190
1 PM	2100	760	190
2 PM	2200	953	193
3 PM	2250	1150	197
4 PM	2250	1341	191
5 PM	2250	1536	195
6 PM		1734	198
05-04-09			
1 PM	2050	1928	194
2 PM			
3 PM	2150	2200	
4 PM	2200	2392	192
5 PM	2200	2584	192
6 PM		2777	193

MAY 09

MAX 2275

AVG 2174

11 READINGS 120

PRES 260.835

	Pressure	Meter	BBLs p
05-06-09			
10:AM	2100	2980	20:
11:AM	2150	3175	195
12:PM	2200	3368	193
1:PM	2200	3565	197
2:PM	2250	3762	197
3:PM	2250	3959	197
4PM			
5:PM			
6:PM			

20

05-08-09			
~~10AM~~	2000	3959	0
11AM	2000	4160	201
12PM	2100	4353	193
1pm	2150	4550	197
2pm	2200	4752	202
3pm	2200	4935	183
4pm	2200	5130	195
5pm	2200	5325	195
6pm		5417	92
05-09-09			
12PM	2050	5610	193
1PM	2100	5803	193
2PM	2200	5996	193
3PM	2150	6186	190
4 PM	2200	6377	191
5:PM		6571	194
6:PM			

	Pressure	Meter	BBLs per
05-11-09			
1PM	2100	6766	195
2PM	2100	6961	195
3:PM	2150	7157	196
4:PM	2200	7353	196
5:PM		7546	193
6:PM			
05-13-09			
8AM	2050	7742	196
9AM	2100	7944	202
10AM	2150	8134	190
11AM	2200	8326	192
12 PM	2200	8512	188
1 PM	2200	8703	189
2 PM	2200	8890	187
3PM	2200	9077	187
4 PM	2200	9260	183
5 PM			
6 PM			
05-15-09			
11AM	2100	9461	201
12pm	2150	9640	191
1pm	2150	9842	202
2pm	2200	10037	195
3pm	2200	10226	189
4pm	2200	10410	184
5pm	2200	10599	189

	Pressure	Meter	BBLs
05-17-09		~~10,790~~	
~~10 AM~~	~~2100~~	~~10,790~~	~~191~~
11 AM	2150	10 982	192
12 PM	2175	11,168	186
1 PM	2200	11,358	190
2 PM	2200	11,550	192
3 PM		11,743	193
05-19-09			
11AM	2100	11,924	181
12 PM	2150	12 101	177
1 PM	2150	12284	183
2 PM	2200	12467	183
3 PM	2200	12652	185
4 PM	2250	12836	184
5 PM	2250	13020	184
6 PM	2250	13210	190
05-20-09			
8am	2150	13408	198
9am	2150	13590	182
10am	2150	13770	180
11am	2200	13953	183
12pm	2200	14136	183
1pm	2250	14320	184
2pm	2250	14496	176
3pm	2250	14688	192
4pm	2250	14876	188
5pm	2250	15060	184
6pm	2250	15246	186

	Pressure	meter	Hour R
05-22-09			
9am	2100	15420	174
10am	2150	15596	176
11am	2150	15774	178
12pm	2150	15952	178
1pm	2200	16130	178
2pm	2200	16312	182
3pm	2200	16488	176
4pm	2200	16660	178
5pm	2250	16842	176
6pm	2250	17014	172
05-23-09			
9:AM	2150	17194	180
10:AM	2200	17374	180
11:AM	2250	17,555	181
12 PM	2250	17,732	177
1:PM	2250	17,909	177
2:PM	2275	18,087	178
3:PM	2275	18,266	179
4:PM			
5:PM			
05-26-09			
9:AM	2100	18,466	200
10:AM	2100	18,654	188
11:AM	2150	18842	188
12:PM	2200	19016	174
1:PM		19200	184
2:PM		19384	184
3:PM		19570	186

	Pressure	Meter	Hourly
05-28-09			
8am	2050	19755	185
9am	2100	19934	179
10AM	2150	20118	184
11AM	2150	20298	180
12pm	2200	20480	182
1pm	2200	20649	169
05-29-09			
8:30AM	2100	20832	183
9:30AM	2150	21010	178
10:30AM	2150	21186	176
11:30AM	2200	21376	190
12:30pm	2200	21554	178
1:30pm	2200	21728	174
2:30pm	2200	21900	172
3:30pm	2200	22074	174
4:30pm	2200	22244	170
05-30-09			
9:AM	2100	22421	177
10:AM	2150	22598	177
11:AM	2200	22776	178
12:PM	2200	22,954	178
1:PM	2250	23,133	179
2:PM	2250	23,311	178
3:PM	2250	23489	178
4:PM	2275	23667	178
5:PM	2275	2,3845	178
6 PM		24,025	180

120 ✓

JUNE 09

MAX 2500

AVG 2293

#Readings 172

Total 394,475

	Pressure	Meter	Hourly
06-01-09			
~~12 PM~~	~~2100~~	~~178~~	~~178~~
1 PM	2100	362	184
2 PM	2150	546	184
3 PM	2150	724	178
4 PM	2200	900	176
5 PM	2200	1076	17[illegible]
6 PM		1254	17[illegible]
06-02-09			
8:AM	2100	1434	180
9:AM	2150	1620	185
10:AM	2200	1788	168
11:AM	2200	1958	170
12 PM	2200	2128	170
1:PM	2200	2298	17[illegible]
2:PM	2200	2468	17[illegible]
3:PM	2225	2644	17[illegible]
4:PM	2250	2804	160
5:PM	2250	2976	17[illegible]
6:PM	2250	3158	18[illegible]
06-03-09			
8am	2100	3341	18[illegible]
9am	2150	3500	15[illegible]
10am	2150	3656	15[illegible]
11am	2150	3814	15[illegible]
12pm	2150	3963	14[illegible]
1pm	2250	4108	14[illegible]
2 pm	2250	4261	15[illegible]
3pm	2250	4413	15[illegible]
4pm	2250	4563	15[illegible]
5pm	2250	4716	153
~~6pm~~			

	Pressure	Meter	Hourly R
06-04-09			
9Am	2100	4890	174
10Am	2200	5043	153
11Am	2200	5188	145
12pm	2200	5332	144
1pm	2200	5479	147
2pm	2250	5627	148
3pm	2250	5774	147
4pm	2250	5922	148
5pm	2250	6070	148
6pm	2250	6182	112
06-05-09			
10Am	2200	6370	188
11Am	2200	6523	153
12pm	2200	6680	163
1pm	Shut down to change Valve-4 sucking side. check at 1:15	6888	208-1p
2pm	Shut down at 1:45pm	6966 78 BBLS Per hour	-78
3pm	" Start at	" "	+
4pm	2300	7113	147 = 2
5pm	2300	7287	174
6pm	2300 43	7470	183

06-06-09	Pressure	Meter	BBLs per
7AM	2250	7621	151
8AM	2250	7786	165
9AM	2300	7959	173
10AM	2300	8132	173
11AM	2300	8305	173
12PM	2300	8478	173
1PM	2300	8652	174
2PM	2300	8825	173
3PM	~~2400~~ NO	8999	174
4PM	2400	9174	175
5PM	2400	9351	177
6PM		9529	178
06-07-09			
6:30 AM	2200	9,697	168
7:30 AM	2250	9,867	170
8:30 AM	2300	10,038	171
9:30 AM	2350	10,208	170
10:30 AM	2350	10,378	170
11:30 AM	2400	10547	169
12:30 PM	2350	10716	169
1:30 PM	2350	10885	169
2:30 PM	2350	11,055	170
3:30PM	2400	11223	168
4:30PM	2425	11395	172
5:30PM	2425	11,571	176
6:30PM	2425	11,763	192
7:30 PM	2425	11935	172
8:30PM	2500	12120	185
9:30 PM	2500	12291	171
10:30 PM	2500	12480	189
11:30 PM	2500	12648	168
12AM			

	Pressure	Meter		BBLs Per
06-09-09				
6:30 AM	2250	12,836		188
7:30 AM	2300	13,010		174
8:30 AM	2300	13187	3½ hrs	177
9:30 AM		Pump off 1 hr 15 min.		
10:30 AM	2250	13328		141
11:30 AM	2350	13500		172
12:30 PM	2350	13673		173
1:30 PM	2400	13847		174
2:30 PM	2400	14020		173
3:30 PM	2400	14193		173
4:30 PM	2400	14366		173
5:30 PM	2400	14540		174
6:00 PM	2400	14,627	7½ hrs	87

06-10-09				
8:30 am	2300	14830		203
9:30 am	2350	15020		190
10:30 am	2350	15226		206
11:30 am	2400	15400		174
12:30 pm	2400	15570		170
1:30 pm	2400	15760		190
2:30 pm	2400	15950		190
3:30 pm	2400	16130		180
4:30 pm	2400	16314		184
5:30 pm	2400	16497		183

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	Pressure	Meter	BBLS PER H
06-11-09			
~~7:30AM~~	~~2300~~	~~16702~~	205
8:30AM	2350	16886	184
9:30AM	2350	17050	164-a
~~10:30AM~~			
06-13-09			
9AM	2200	17221	171
10AM	2300	17395	174
11AM	2300	17570	175
12PM	2350	17743	173
1PM	2350	17918	175
06-15-09			
9AM	2200	18094	176
10AM	2250	18272	178
11AM	2250	18307	35
06-16-09			
9AM	2200	18500	193
10AM	2250	18680	180
11:AM	2300	18857	177
3:PM	2250	19056	199
4:PM	2300	19245	189
5:PM	2350	19422	177
6:PM	2350	19576	154

	Pressure	Meter	BCLs Per
06-17-09			
9:AM	2250	19760	184
10:AM	2300	19940	180
11:AM	2300	20122	182
12:PM	2350	20290	168
1:PM	2350	20452	162
5pm	2300	20638	186
6pm	2350	20843	205
06-18-09			
8AM	2200	21,031	188
9AM	2300	21,219	188
10AM	2300	21,403	184
11AM	2350	21,588	185
12 [illegible]AM	2350	21,771	183
1 PM	2400	21,955	184
2 PM	2400	22,138	183
3 PM	2400	22,323	185
06-20-09			
7:30 AM	2200	22506	183
8:30 AM	2250	22693	187
9:30 AM	2275	22888	195
10:30 AM	2300	23087	199
11:30 AM	2300	23285	198
12:30 PM	2350	23484	199
1:30 PM	2350	23682	198
2:30 PM	2375	23881	199
3:30 PM	2400 136	24079	198
4:30 PM		24277	198

	Pressure	Meter	BBLs Per
06-22-09			
9:AM	2200	24,483	~~206~~
10:AM	2250	24,687	204
11:AM	2300	24,890	203
12:PM	2300	25,090	200
1:PM	2350	25,289	199
2:PM	2350	25489	200
3:PM	2350	25689	200
4:PM	2400	25891	202
5:PM	2400	26093	202
06-24-09			
10:AM	2200	26311	218
11:AM	2250	26511	200
12 PM	2300	26,701	190
1: PM	2300	26,900	199
2: PM	2350	27,097	197
3:PM	2350	27,295	198
4:PM	2350	27,493	198
5:PM	2350	27,689	196
6:PM	2350	27889	200
06-25-09		~~28,000~~	~~200~~
7am	2250	28,106	217
8AM	2300	28304	198
9am	2300	28504	200
10am	2300	28698	194

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Pressure	Meter	BBLS PER
06-27-09		
~~9:AM 2150~~	~~28,886~~	~~188~~
10:AM 2200	29,074	188
11: AM 2250	29,262	188
12: PM 2275	29451	189
1: PM 2300	29639	188
2: PM 2325	29827	188
3: PM 2350	30014	187
4: PM 2350	30202	188
06-30-09		
7:30 AM 2100	30378	176
8:30 AM 2200	30567	189
9:30 AM 2200	30753	186
10:30 AM 2250	30939	186
11:30 AM 2250	31125	186
12:30 PM 2300	31311	186
07-01-09		
9:30 AM 2150	194	194
10:30 AM 2200	387	193
11:30 AM 2200	575	188
12:30 PM 2250	763	188
1:30 PM 2250	969	206
07-03-09		
9:30 am 2100	1162	193
10:30 am 2100	1360	198
11:30 am 2200	1558	198
12:30 pm 2200	1760	202
1:30 pm 2250	1960	200
2:30 pm 2250	2154	194
3:30 pm 2300	2358	204

	Pressure	Meter		BBLS PER
06-27-09				
~~9:AM~~	~~2150~~	~~28,886~~		~~188~~
10:AM	2200	29,074		188
11:AM	2250	29,262		188
12:PM	2275	29451		189
1:PM	2300	29639		188
2:PM	2325	29827		188
3:PM	2350	30014		187
4:PM	2350	30202		188
06-30-09				
7:30 AM	2100	30378		176
8:30AM	2200	30567		189
9:30 AM	2200	30753		186
10:30 AM	2250	30939		186
11:30AM	2250	31125		186
12:30 PM	2300	31311		186
07-01-09				
9:30AM	2150	194	JULY 09	194
10:30 AM	2200	387		193
11:30 AM	2200	575		188
12:30 PM	2250	763		188
1:30 PM	2250	969	MAX 2400	206
07-03-09				
9:30 AM	2100	1162		193
10:30 am	2100	1360	AVG 2262	198
11:30 AM	2200	1558		198
12:30 pm	2200	1760	[illegible] 198	202
1:30 pm	2250	1960	[illegible] 47,900	200
2:30 pm	2250	2154		194
3:30 pm	2300	2358		204

	Pressure	Meter	BBLs
07-05-09			
1:PM	2100	2,563	20[illegible]
2:PM	2150	2,769	20[illegible]
3:PM	2150	2,971	20[illegible]
07-08-09			
8:AM	2050	3168	197
9:AM	2100	3360	192
10:AM	2150	3556	196
11:AM	2150	3754	198
12:PM	2200	3940	186
1:PM	2200	4,126	186
2:PM	2250	4,324	198
3:PM	2250	4,517	193
4PM	2250	4,713	196
07-09-09			
12pm	2100	4916	203
1pm	2150	5114	198
2pm	2200	5308	194
3pm	2200	5505	197
07-11-09			
8:AM	2100	5,705	200
9:AM	2100	5,903	198
10:AM	2150	6,101	198
11:AM	2200	6,299	198
12:PM	2200	6,494	195
1:PM	2250	6,690	196
2:PM	2250	6,886	196
3:PM	2250	7,080	194
4PM	2250	7271	191
5:PM	2250	7,462	191
6:PM	2250	7,650	188

	Pressure	Meter	BBLs per
07-13-09			
8:AM	2150	7,837	187
9:AM	2150	8,025	188
10:AM	2150	8,210	185
11:AM	2200	8,397	187
12:PM	2200	8,584	187
1:PM	2200	8,772	188
2:PM	2200	8,961	189
3:PM	2200	9,149	188
4:PM	2200	9,338	189
5:PM	2250	9,527	189
6:PM	2250	9,725	198
07-14-09			
8:AM	2150	9903	178
9:AM	2150	10081	178
10:AM			
11:AM	1800	10125	44
12:PM	2200	10336	211
1:PM	2200	10532	196
2:PM	2200	10727	195
3:PM	2200	10923	196
4:PM	2250	11119	196
5:PM	2250	11311	192
6:PM	2300	11508	197
07-15-09			
8:30am		11,715	207
9:30am		11922	207
10:30am			
11:30am	2200	12129	207
12:30pm	2200	12283	154
1:30pm	2200	12432	149
2:30pm	2200	12556	124

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	Pressure	Meter	BBLs pe
07-15-01			
3:30PM	2200	12655	99
4:30PM			
5:30PM			
6:30PM			
07-16-09			
8:00AM	2000	12704	49
12:00pm	2100	12924	220
1:00pm	2100	13087	163
2:00pm	2200	13287	200
3:00pm	2200	13481	194
4:00pm	2300	13665	184
5:00pm	2350	13854	189
6:00pm	2350	14015	161
07-17-09			
7:00AM	2250	14200	185
8:00AM	2300	14400	200
9:00AM	2300	14586	186
10:00AM	2300	14770	184
11:00AM	2300	14962	192
~~12:00pm~~	07-18-09		
8:AM	2200	15,135	173
9:AM	2250	15318	183
10:AM	2250	15,505	187
11:AM	2300	15,692	187
12PM	2300	15,877	185
1:PM	2300	16,062	185
2:PM	2350	16,249	187
3:PM	2350	16,433	184
4:PM	2350	16,614	181
5:PM	2350	16,793	179

	Pressure	Meter	BBLs pe
12:30 PM	2200	16,974	181
1:30 AM	2250	17,153	179
2:30 AM	2300	17,335	182
3:30 AM	2350	17,518	183
07-20-09			
9:AM	2150	17,669	151
10:AM	2200	17,836	167
11:AM	2200	18003	167
12:PM	2250	18170	167
1:PM	2250	18,337	167
2:PM	2250	18,504	167
07-21-09			
10 AM	2150	18675	171
11 AM	2150	18835	160
12 PM	2200	18995	160
1 PM	2200	19155	160
2 PM	2250	19315	160
3 PM	2250	19,478	163
4 PM	2250	19638	160
5 PM		19803	165
6 PM	2250	19969	166
07-22-09			
7:30 AM	2150	20131	162
8:30 AM	2200	20288	157
9:30 AM	2200	20450	162
10:30 AM	2200	20608	158
11:30 AM	2250	20768	160
12:30 PM	2250	20928	160
1:30 PM	2250	21089	161
2:30 PM	2250	21248	159
3:30 PM	2250	21407	159
4:30 PM	2250	21566	159
5:30 PM	2250	21725	159

07-23-09	Pressure	Meter	BBLs Per 1
7:AM	2200	22,065	178
8:AM	2200	22,254	189
12:PM	2300	22,416	162
1:PM	2300	22,599	183
2:PM	2350	22,783	184
3PM	2350	22,966	183
4:PM	2350	23,149	183
5:PM	2350	23,332	183
6:PM	2350	23519	187
07-24-09			
7:30AM	2250	23708	189
8:30AM	2250	23891	183
2:00pm	2300	24120	229
3:30pm	2300	24283	163
4:00pm	2300	24487	204
5:00pm	2300	24667	180
6:00pm	2300	24867	200
07-25-09			
8:AM	2300	25,047	180
9:AM	2300	25,228	181
10:AM	2350	25,407	179
11:AM	2350	25,588	181
12:PM	2350	25,769	181
1:PM	2400	25,951	182
2:PM	2400	26,132	181
3:PM	2400	26,313	181
4:PM	2400	26,495	182
5:PM	2400	26,677	182
6PM	2400 144	26,863	186

	Pressure	Meter	BBLs pe
07-26-09			
~~11:AM~~	~~2250~~	~~27,029~~	~~166~~
12:PM	2300	27,210	181
1: PM	2300	27291	181
2:PM	2300	27,573	182
3:PM	2350	27,754	181
4:PM	2350	27,938	184
5:PM	2400	28,121	183
07-27-09			
10:AM	2200	28,304	183
11:AM	2300	28,487	183
12:PM	2350	28,671	184
1:PM	2350	28,853	182
2:PM	2350	29,035	182
3: PM	2400	29,217	182
4:PM	2400	29,400	183
5:PM	2400	29,583	183
6:PM	2400	29,767	184
07-28-09			
8:AM	2250	29,954	187
9:AM	2300	30,138	184
10:AM	2300	30,322	184
11:AM	2350	30,505	183
12:PM	2400	30,688	183
1:PM	2400	30,872	184
2:PM	2400	31,057	185
3:PM	2400	31,238	181
4:PM	2400	31,418	180
5:PM	2400	31,598	180
6:PM	2400	31,780	182

	Pressure	Meter		BBLs
07-29-09	2250	31,968		188
9:AM		32,102	3/4 of hr	134
10:AM		OFF		
11:AM		OFF		
12:30		32308		206
1:30	2300	32485		177
2:30	2300	32485		172
3:30	2350	32657		172
4:30	2400	32832		175
5:30	2400	33014		182
6:PM	2400	33109		95
07-30-09				
11:AM	2300	33284		175
12 pm	2300	33470		186
1:pm	2300	33650		180
2:pm	2300	33832		182
3:pm	2300	34010		178
4:pm	2300	34170		160
5:pm	2350	34365		195
6:pm	2350	34557		192
07-31-09				
7:AM	2200	34740		183
8:am	2250	34912		172
9:am	2300	35102		190
10:am	2300	35264		162
11:am	2300	35436		172
12:pm	2300	35600		164
1 pm	2350	35784		184
2 pm	2350	35964		180
3 pm	2400	36095		131
4 pm	2400	36295		200
5 pm	2400	36478		183
6 pm	2400	36656		178

190

AUG 09

MAX 2350

AUG 2214

	Pressure	Meter		BBLs Per h
08-01-09				
8:AM	2200	186		186
9:AM	2250	378		192
10:AM	2250	568		190
11:AM	2300	760		192
08-02-09				
10:AM	2150	936	[illegible] 173	176
11:AM	2200	1108		172
12:PM	2200	1281	[illegible] 383,000	173
1:PM	2250	1453		172
2:PM	2250	1624		171
3:PM	2300	1796		172
4:PM	2300	1969		173
[illegible]:PM	2300	2142		173
08-03-09				
2:PM	2150	2304		162
[illegible]:PM	2200	2467		163
4:PM	2250	2630		163
5:PM	2250	2772	Pump off ?	142
6:PM		2783	Pump off Low suction	
08-04-09				
10:30 AM	2150	2939		156
11:30 AM	2200	3106		167
12:30 PM	2250	3273		167
1:30 PM	2250	3439		166
2:30 PM	2250	3604		165
3:30 PM	2300	3770		166
4:30 PM	2300	3934		164
[illegible]:30 PM	2300	4099		165
6:30 PM	2300	4265		166

	Pressure	Meter	BBLs
08-05-09			
9:AM	2200	4435	17
10:AM	2250	4601	16
11:AM	2250	4769	16
12:PM	2250	4937	16
1:PM	2300	5105	16
2:PM	2300	5273	16
3:PM	2300	5441	168
4:PM	2300	5608	16
5:PM	2300	5776	16
6:PM	2300	5955	179
08-06-09			
7:Am	2200	6136	181
8:Am	2200	6296	160
9:Am	2250	6470	174
10:AM	2300	6590	120
11:Am	2300	6738	148
11Am	Pump off	change Values	10 values
	Start pump up.		
12:45pm			
1:45pm	2250	6940	202
2:45pm	2300	7140	200
3:45pm	2300	7330	190
4:45pm	2300	7526	196
08-07-09			
7:30Am	2200	7700	174
8:30Am	2200	7870	170
9:30Am	2250	8050	180
10:30Am	2250	8240	190
11:30Am	2250	8405	165

	Pressure	Meter	BBLS
08-08-09			
8:AM	2150	8574	169
9:AM	2200	8,744	170
10:AM	2250	8,914	170
11:AM	2250	9,085	171
12:PM	2250	9,257	172
1:PM	2300	9,429	172
2:PM	2300	9,596	167
3:PM	2300	9,764	168
4:PM	2300	9,933	169
5:PM	2300	10,103	170
6:PM	2300	10,275	172
08-09-09			
11:AM	2200	10,454	179
12:PM	2250	10,632	178
1:PM	2250	10,810	178
2:PM	2250	10,989	179
3:PM	2250	11,170	181
08-10-09			
1:30 PM	2100	11,290	120
2:30 PM	2150	11,430	140
3:30 PM	2200	11,590	160
4:30 PM	2250	11,750	160
5:30 PM	2300	11,924	174

70

	Pressure	Meter	BBLs
11:AM	2150	12,087	16
12:PM	2200	12,252	16
1:PM	2250	12,417	16
2:PM	2250	12,584	16
3:PM	2250	12,754	17
4:PM	2250	12908	15
5:PM	2250	13,074	16
6:PM	2300	13,241	16
08-12-09			
10:15Am	2150	13416	175
12:15pm	2200	13590	174
1:15pm	2200	13770	180
2:15pm	2250	13954	184
3:15pm	2300	14136	182
4:15 pm	2300	14330	194
5:15 pm	2300	14517	187
08-13-09			
11 am	2300	14698	181
12pm	2200	14860	162
1 pm	2200	15017	157
2pm	2200	15197	180
3pm	2250	15370	173
4pm	2250	15574	204
5pm	2350	15716	142
8-14-09			
9Am	2250	15917	201
10Am	2300	16098	181
11Am	2300	16259	161
12:00pm	2350	16428	169
1pm	2350	16606	178
2pm	2350	16771	165
3pm	2350	16953	186
4pm	2300	17117	164

	Pressure 8-16-09	BBLS	BBLS / HR
9 Am	2200	17,117	
~~[illegible]~~	~~2250~~	~~17,274~~	~~157~~
11 Am	2300	17,467	193
12 pm	2300	17,610	143
~~1~~ pm	2350	17,779	169
2 pm	2300	17,948	169
3 pm	2300	18,117	169
4 pm	2350	18,296	179
~~5 pm~~			
08-17-09			
8:30 am	2100	18460	164
9:30 am	2150	18640	180
10:30 am	2150	18800	160
11:30 am	2200	18990	190
12:30 pm	2200	19180	190
1:30 pm	2200	19360	180
2:30 pm	2200	19540	180
3:30 pm	2200	19730	190
4:30 pm	2200	19921	191
08-18-09			
9 Am	2150	20122	201
10 Am	2200	20304	182
11 Am	2200	20490	186
12 pm	2200	20676	186
1 pm	2200	20854	178

8-19-09 Change Valve in well house that open p
to start pump up.

20057

	Pressure	Meter	Hour Rat
08-20-09			
9AM	2050	21046	192
10 AM	2100	21236	190
11 AM	2150	21420	184
12pm	2150	21600	180
1 pm	2150	21770	170
2pm	2200	21930	160
3pm	Turn off pump at 230 pm	Change filter 5 & 3	Started pump at
4pm	2250	22002	72 4#
5pm	2300	221185	183
6pm	2350	22369	184
08-21-09			
8.00am	2100	22556	187
9 AM	2150	22740	184
10 am	2200	22925	185
11 am	2200	23112	187
12 pm	2200	23290	178
1 pm	2200	23460	170
2pm	2250	23640	180
3pm	2250	23815	175
8-22-09	Did not run pump! Not enough loads!		
8-23-09			
1:PM	2050	23,992	177
2:PM	2100	24,161	169
3:PM	2150	24,329	168
4:PM	2200	24,499	170

	Pressure	Meter	BBLs
08-25-09			
11 AM	2030	24,649	[illegible]
12 PM	2100	24,810	16
1 PM	2100	24,970	16
2 PM	2150	25,130	16
3 PM	2200	25291	16
08-26-09			
1 PM	2050	25,471	180
2 PM	2100	25,640	16[illegible]
3 PM	2150	25,801	16[illegible]
4 PM	2150	25,971	170
08-27-09			
12:45pm	2050	26152	181
1:45pm	2100	26330	178
2:45pm	2150	26513	183
08-29-09			
8:AM	2050	26710	197
9.am	2100	26900	190
10am	2100	27075	175
11am	2150	27246	171
12pm	2150	27420	174
1pm	2200	27600	180
2pm	2200	27782	182

162

	PRESSURE	METER	BBLS PER H
08-31-09			
10:AM	2000	27,954	172
11:AM	2050	28,124	170
09-08-09			
8:AM	1950	163	163
9:AM	2000	327	164
10:AM	2050	492	165
11:AM	2050	657	165
12:PM	2050	824	167
1:PM	2100	989	165
2:PM	2100	1,155	166
3:PM	2100	1,326	171
4:PM	2100	1,497	171
09-12-09			
	Pressure	meter	BBLS PER
9 am	1950	1.6	1.6
10 am	1950	2.6	1.8
11 AM			
12 pm	2000	4.4	2.8
1 pm	2050	6.0	1.6
2 pm	2050	7.8	1.8
3 pm	2100	9.5	1.7
4 pm	2100	11.2	1.7
5 pm	2100	12.7	1.5

Change filter 5 + 3 Turn off pump at 10:0

started up pump at 11 AM

PRESSURE		METER	BBLS PER H
08-31-09			
10:AM	2000	27,954	172
11:AM	2050	28,124	170
09-08-09			
8:AM	1950	163	163
9:AM	2000	327	164
10:AM	2050	492	165
11:AM	2050	657	165
12:PM	2050	824	167
1:PM	2100	989	165
2:PM	2100	1,155	166
3:PM	2100	1,326	171
4:PM	2100	1,497	171

SEPT 09

09-12-09	Pressure	meter	BBLS PER
9 AM	1950	1.6	1.6
10 AM	1950	2.6	1.8
11 AM			
12 pm	2000	4.4	2.8
1 pm	2050	6.0	1.6
2 pm	2050	7.8	1.8
3 pm	2100	9.5	1.7
4 pm	2100	11.2	1.7
5 pm	2100	12.7	1.5

Change filter 5+3 Turn off pump at 10:0

started up pump at 11 AM

MAX 2350

AVG 2184

READINGS 154

PRES 336,400

	Pressure	Meter	BDLs per
10 AM	2000		
11 AM	2050		
12 PM	2100		
1 PM	2150	~~19.5~~	
		195	
09-14-09			
2 PM	2000	368	173
3 PM	2000	540	172
09-15-09			
2:PM	1950	739	199
3:PM	2050	920	181
4:PM	2050	1102	182
5:PM	2100	1283	181

09-18-09

	Pressure	Meter	BBLs
8 AM	1900	1477	194
9 AM	2000	1665	188
10 AM	2050	1852	187
11 AM	2150	2041	189
12 PM	2200	2225	184
1 PM	2200	2410	185
2 PM	2200	2595	185
3 PM	2200	2779	184
4 PM	2200	2963	184
5 PM	2200	3148	185
6 PM	2200	3331	183
7 PM	2250	3512	181
8 PM	2250	3693	181
9 PM	2250	3876	183
10 PM	2250	4060	184
11 PM	2250	4240	180
12 AM	2250	4424	184
1 AM	2250	4602	178
2 AM	2250	4788	186
3 AM	2250	4976	188
4 AM	2250	5156	180
5 AM	2250	5344	188
6 AM	2250	5530	186
7 AM	2200	5708	178

5708

09-19-09

	Pressure	Meter	BBLs
~~8:AM~~	~~2200~~	~~5895~~	~~18~~
9:AM	2200	6080	18
10:AM	2250	6271	19
11:AM	2200	6458	18
12:PM	2200	6646	18
1:PM	2300	6837	191
2:PM	2300	7030	193
3:PM	2300	7224	194
4:PM	2300	7418	194
5:PM	2300	7611	~~194~~
6:PM	2300	7807	196
7:PM	2350	7999	196
8:PM	2300	8191	192
9:PM	2300	8388	197
10:PM	2300	8580	192
11:PM	2300	8774	194
12 AM	2300	8964	190
1:AM	2300	9158	194
2:AM	2300	9354	196
3:AM	2300	9546	192
4:AM	2300	9738	192
5:AM	2300	9930	192
6:AM	2300	10110	180
7:AM	2250	10288	178

66

09-20-09

	Pressure	Meter	BBLs Pa
8 AM	2250	10,478	190
9 AM	2250	10,668	190
10 AM	2250	108,58	190
11 AM	2250	11,048	191
12 PM	2250	11,237	189
1 PM	2250	11,425	188
2 PM	2250	11,614	189
3 PM	2250	11,802	188
4 PM	2250	11,989	187
5 PM	2250	12,178	189
6 PM	2250	12,368	19[illegible]
7 PM	2250	12,556	18[illegible]
8 PM	2250	12,744	188
9 PM	2300	12,946	202
10 PM	2300	13,134	188
11 PM	2300	13,326	192
12 AM	2300	13,518	192
1 AM	2300	13,706	188
2 AM	2300	13,898	192
3 AM	2300	14,084	186
4 AM	2300	14,276	192
5 AM	2300	14,466	190
6 AM	2300	14,656	190
7 AM	2250	14,840	184

09-21-09

	Pressure	Meter	BBLs
8 AM	2250	15,023	18
9 AM	2250	15213	190
10 AM	2250	15403	190
11 AM	2300	15,593	190
12 PM	2300	15,781	188
1 PM	2250	15,970	18
2 PM	2250	16,159	18
3 PM	2250	16,348	18
4 PM	2250	16,538	19
5 PM	2250	16,728	190
6 PM	2250	16,916	18
7 PM	2250	17,105	18
8 PM	2250	17,296	19
9 PM	2250	17,498	198
10 PM	2250	17,686	186
11 PM	2250	17,878	19
12 AM	2250	18,066	188
1 AM	2250	18,260	194
2 AM	2250	18,450	190
3 AM	2250	18,640	190
4 AM	2250	18,830	190
5 AM	2250	19022	192
6 AM	2250	19200	178
7 AM	2250	19384	184

1:4

09-22-09

	Pressure	Meter	BBLs /
8 AM	2250	19,581	197
9 AM	2250	19,777	196
10 AM	2250	19,981	204

(09-25-09 Change Filter 5+3) 18,698 BBLs For Test

19981

09-25-09	Pressure	meter	BBLS PER
3pm	2000	20176	195
4pm	2000	20368	192
5pm	2050	20564	196

	Pressure	meter	BBLS PER H
09-26-09			
8am	2000	20764	200
9am	2050	20956	192
10am	2200	21145	189
11am	2200	21334	189
12pm	2200	21523	189
1pm	2250	21710	187
2pm	2250	21900	190
3pm	2250	22090	190

	Pressure	Meter	BBLs Per h.
09-27-09			
9:AM	2050	22,285	195
10:AM	2100	22,472	187
11:AM	2100	22,660	188
12:PM	2150	22,847	187
1:AM	2150	23,034	187
2:AM	2150	23,223	189
3:AM	2200	23,419	196
4:PM	2200	23,625	206
5:PM	2200	23,839	214
09-28-09			
2:PM	2100	24,045	206
3 PM	2150	24,251	206
4 PM	2150	24,458	207
5 PM	2150	24,663	205
09-29-09			
11:AM	2050	24,882	219
12:PM	2100	25,099	217
1:PM	2150	25,315	216
2:PM	2150	25,532	217
3:PM	2150	25,753	221
4:PM	2200	25,974	221
5:PM	2200	26,196	222
09-30-09			
11:AM	2050	26,409	213
12:PM	2100	26,613	204
1 PM	2100	26,818	205
2:PM	2150	27,028	210
3:PM	2150	27,238	210
4:PM	2200	27,447	209

OCT 09

MAX 2300

AVG 2145

	Pressure	Meter	BBLS
10-1-09			
8:30 Am	2250	216	21
9:30 Am	2250	428	21
10:30 Am	2150	634	20
11:30 Am	2150	850	21
12:30 pm	2150	1060	21
1:30 pm	2200	1264	20
2:30 pm	2200	1474	21
3:30 pm	2200	1680	20
4:30 pm	2200	1889	20
10-02-09			
11 Am	2100	2116	227
12 pm	2100	2323	207
1 pm	2150	2534	211
2 pm	2150	2750	216
3 pm	2200	2964	214
4 pm	2200	3181	217
10-04-09			
9 Am	2000	3404	223
10 Am	2100	3612	208
11 Am	2100	3814	202
12 pm	2100	4026	212
1 pm	2100	4224	198
2 pm	2150	4436	212
3 pm	2150	4640	204

	PRESSURE	METER		BBLS PER
10-05-09				
10:AM	2050	4,841		201
11:AM	2050	4,920	Power surge	79
12:PM	2150	5,124		204
1:PM	2100	5,327		203
2:PM	2150	5,532		205
3:PM	2150	5,737		205
4:PM	2150	5,942		205
5:PM	2150	6,151		209
10-06-09				
8 AM	2050	6,337		186
9 AM	2100	6,539		202
10 AM	2100	6,740		201
11 AM	2150	6,942		202
12 PM	2150	7,144		202
1 PM	2150	7,346		202
2 PM	2200	7,550		204
3 PM	2200	7,752		202
4 PM	2200	7,955		203
5 PM	2200	8,165		210
10-07-09				
3:PM	2050	8,383		218
4:AM	2100	8,601		218
5:AM	2150	8,818		217

8,018

10-08-09

	Pressure	Meter	BBLs pe
8:AM	2050	9,040	222
9:AM	2100	9,253	213
10:AM	2100	9,463	210
11:AM	2150	9,674	211
12:AM	2150	9,884	210
1:PM	2150	10,095	211
2:PM	2150	10,306	211
3:PM	2200	10,516	210
4:PM	2200	10,726	210
5:PM	2200	10,939	213

10-9-09

	Pressure	Meter	BBL's pe
9:Am	2150	11163	224
10:Am	2200	11372	209
11:Am	2200	11580	208
12:pm	2300	11786	206
1pm	2300	12013	227
2pm	2300	12240	22[illegible]
3pm	2300	12467	22[illegible]
4pm	2300	12698	231
5pm	2300	12,906	208

10-10-09

8Am	2100	13130	224
9am	2150	13350	220
10am	2200	13564	214
11am	2200	13766	202
12pm	2200	13976	210
1pm	2200	14182	206
2pm	2200	14387	205

	Pressure	Meter	BBL
10-11-09			
11:30 AM	2150	14,649	26
12:30 PM	2150	14,899	25
1:30 PM	2150	15,149	25
2:30 PM	2150	15,397	24
3:30 PM	2150	15,646	249
4:30 PM	2200	15,895	249
10-12-09			
8:30 AM	2050	16,158	26
9:30 AM	2100	16,425	267
10:30 AM	2150	16,686	261
11:30 AM	2150	16,946	26
12:30 PM	2150	17,194	24
1:30 PM	2150	17,446	25
2:30 PM	2150	17,698	25
3:30 PM	2200	17,950	25
10-13-09			
10:30 AM	2050	18,196	24
11:30 AM	2100	18,440	24
12:30 PM	2150	18,684	24
1:30 PM	2150	18,929	24
2:30 PM	2150	19,175	24
3:30 PM	2200	19,421	24
4:30 PM	2200	19,670	24

	Pressure	Meter	BBLs P
10-14-09			
8:AM	2050	19,911	241
9:AM	2100	20,153	242
10:AM	2100	20,390	237
11:AM	2100	20627	23[illegible]
12:PM	2150	20865	238
1:PM	2150	21,102	23[illegible]
2:PM	2150	21,341	239
3:PM	2150	21,583	24[illegible]
4:PM	2200	21825	24[illegible]
5:PM	2200	22,069	244
10-15-09			
8:30 AM	2100	22305	236
9:30 AM	2100	22564	259
10:30 AM	2150	22786	222
11:30 AM	2150	23016	230
12:30pm	2150	23240	224
1:30pm	2200	23490	250
2:30pm	2200	23734	244
3:30pm	2200	23974	240
4:30pm	2200	24217	243
10-16-09			
9AM	2200	24485	268
10AM	2250	24728	243
11AM	2250	24974	246
12pm	2250	25212	238
1pm	2250	25450	238
2pm	2250	25700	250
3pm	2300	25942	242
4pm	2300	26174	232

	PRESSURE	METER	BBLS PER H
10-17-09			
11:30 AM	2050	26392	~~218~~
12:30 pm	2100	26,602	210
1:30 pm	2100	26 812	210
2:30 pm	2100	27022	210
3:30 pm	2100	27230	208
4:30 pm	2100	27445	215
10-18-09			
9:30 AM	2000	27,633	188
10:30 AM	2050	27,825	192
11:30 AM	2050	28,013	188
12:30 PM	2050	28,202	189
[illegible] PM	2100	28 391	189
[illegible]:30 PM	2100	28,579	188
[illegible]:30 PM	2100	28,770	191
[illegible]:30 PM	2200	28,960	190
[illegible]-19-09			
~~[illegible]~~		28,960	
[illegible]:30 PM	1900	29,164	204
[illegible]:30 PM	2000	29,369	205
[illegible]:30 PM	2050	29,575	206
10-20-09			
[illegible] AM	1950	29,709	134
12 PM	2000	29,847	138
[illegible] PM	2050	29,990	143
[illegible] PM	2050	30,131	141
[illegible] PM	2050	30,275	144
[illegible] PM			
[illegible] PM			

	Pressure		Meter	BBLs Per
11:30AM	2050	10-21-09	30,410	135
12:30PM	2100		30,568	158
1:30PM	2150		30,726	158
2:30PM	2150		30,883	157
3:30PM	2150		31,041	158
4:30PM	2150		31,213	172
10-22-09				
9:30Am	2100		31410	197
10:30Am	2100		31570	160
11:30Am	2150		31724	154
12:30pm	2150		31900	176
1:30pm	2200		32046	146
2:30pm	2200		32208	162
3:30pm	2200		32372	164
~~4:30pm~~				
10-23-09				
9:30am	2100		32550	178
10:30Am	2100		32728	178
11:30am	2150		32910	182
12:30pm	2150		33074	164
1:30pm	2150		33250	176
2:30pm	2150		33430	180
3:30pm	2150	160 ✓	33608	178
4:30pm	2150		33788	180

	PRESSURE	METER	BBLS PER
10-24-09			
9 am	2100	33974	186
10 am	2100	34160	186
11 am	2150	34336	176
12 pm	2150	34514	178
1 pm	2150	34686	172
2 pm	2200	34858	172
3 pm	2200	35036	178
4 pm	2200	35210	174
10-25-09			
1:30 pm	2050	35412	202
2:30 pm	2100	35584	172
3:30 pm	2150	35760	176
4:30 pm	2150	35938	178
10/26/09			
2:00	2150	36095	157
3:00	2150	36263	168
4:00		36400	137
10-27-09			
3:PM			
4:PM			
5:PM	2100	36,934	534
10-28-09			
12:30 PM	2050	37093	159
1:30 PM	2100	37241	148
2:30 PM	2100	37391	150
3:30 PM	2100	37537	146
4:30 PM	2150	37683	146
5:30 PM	2150	37758	75

	Pressure	Meter	BBLS Pi
10-29-09			
9AM	2050	37928	170
10AM	2100	38076	148
11AM	2150	38260	184
pump down changed values			
2:30	2250	38467	207
3:30	2300	38632	170
4:30	2300	38768	136
10-30-09			
2:PM	2050	38931	163
3:PM	2100	39094	163
4:PM	2150	39,256	162
5:PM	2150	39,417	161
10-31-09			
9:AM	2050	39,588	171
10:AM	2100	39,759	171
11:AM	2150	39,930	171
12:AM	2150	40,101	171
1:PM	2150	40,270	169
2:PM	2150	40,440	170
3:PM	2200	40,610	170
4:PM	2200	40,781	171
5:PM	2200 200	40,952	171
11-01-09			
10:AM	2050	171	171
11:AM	2100	346	175
12:PM	2150	520	174
1:PM	2150	693	173
2:PM	2150	841	148
3:PM	2150	988	147
4:PM			
5:PM			

	Pressure	Meter	BBLS F
10-29-09			
9AM	2050	37928	170
10AM	2100	38076	148
11AM	2150	38260	184
pump down changed values			
2:30	2250	38467	207
3:30	2300	38632	170
4:30	2300	38768	136
10-30-09			
2:PM	2050	38931	163
3:PM	2100	39094	163
4:PM	2150	39,256	162
5:PM	2150	39,417	161
10-31-09			
9:AM	2050	39,588	171
10:AM	2100	39,759	171
11:AM	2150	39,930	171
12:AM	2150	40,101	171
1:PM	2150	40,270	169
2:PM	2150	40,440	170
3:PM	2200	40,610	170
4:PM	2200	40,781	171
5:PM	2200	40,952	171
11-01-09			
10:AM	2050	171	171
11:AM	2100	346	175
12:PM	2150	520	174
1:PM	2150	693	173
2:PM	2150	841	148
3:PM	2150	988	147
4:PM			
5:PM			

NOV 09

MAX 2250

AVG 2129

PREADJUST 254

PREF 540,800

	Pressure	Meter	BBLs Per
1:PM	2050	1,149	161
2:PM	2100	1,307	158
3:PM	2150	1,466	159
4:PM	2150	1,624	158
5:PM	2150	1,784	160
11-03-09			
12:PM	2050	1,943	159
1:PM	2100	2,099	156
2:PM	2150	2,253	154
3:PM	2150	2,407	154
4:PM	2150	2,562	155
5:PM	2150	2,719	157
11-04-09			
9:30	2100	2879	160
10:30	2100	3040	161
11:30	2150	3202	162
12:3 PM	2150	3362	160
1:30 PM	2150	3531	169
2:30 PM	2150	3694	163
3:30 PM	2150	3857	163
4:30 PM	2150	4015	158
11-5-09			
8:30	2100	4178	163
9:30	2150	4345	167
10:30	2150	4503	158
11:30	2150	4661	158
12:30	2200	4821	160
1:30	2200	4981	160
2:30	2200	5137	156
3:30	2200	5304	167
4:30	2200 34 ✓	5465	161

	Pressure	Meter	BBls Pe
11/6			
11:30	2200	5611	146
12:30	2150	5769	158
1:30	2150	5919	150
2:30	2200	6093	174
3:30	2200	6254	161
4:30	2200	6407	153
11/7			
2:PM	2050	6,573	166
3:PM	2100	6,733	160
4:PM	2150	6,892	159
5:PM	2150	7,052	160
11-08-09			
1:PM	2050	7,218	166
2:PM	2100	7,381	163
3:PM	2150	7,543	162
4:PM	2150	7,706	163
5:PM	2150	7,866	160
11-09-09			
11:AM	2050	8,015	149
12:PM	2100	8,168	153
1:PM	2150	8,321	153
2:PM	2150	8,474	153
3:PM	2150	8,627	153
4:PM	2150	8,782	155
5:PM	2150	8,938	156

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24,890

	Pressure		Meter	BBLs past
11-24-09				
5:AM	2100		25061	171
6:AM	2150	58	25220	159
7:AM				
8:AM				
9:AM				
10:AM				
11:AM				
12:PM				
1:PM				
2:PM				
3:PM				
4:PM				
5:PM				
6:PM				
7:PM				
8:PM				
9:PM				
10:PM				
11:PM				
12:25-09				
12:AM				
1:AM				
2:AM				
3:AM				
4:AM				
5:AM				
6:AM				
7:AM				
8:				

	Pressure	Meter	BBLs A
11-10-09			
9:AM	2050	9,098	160
10:AM	2100	9,259	161
11:AM	2150	9,419	160
12:PM	2150	9,580	161
1:PM	2150	9,741	161
2:PM	2150	9,901	160
3:PM	2150	10,059	158
4:PM	2150	10,217	158
5:PM	2150	10,386	169
11/11	~~2115~~		
11:45	2150	10559	173
12:45	2150	10707	148
1:45		10855	148
2:45	2150	11017	162
3:45	2150	11169	151
4:45	2150	11320	151
11/12			
8:30	2100	11456	136
9:30	2150	11622	166
10:30	2150	11775	153
11:30	2200	11937	162
12:30	2150	12093	156
1:30	2150	12252	159
2:30	2200	12412	160
3:30	2200	12571	159
4:30	2200	12717	146
11/13			
11:00	2100	12872	155
12:00	2150	13040	168
1:00	2150	13196	156

84

Pressure		Meter	BBC Per ha
11-21-09			
10 AM	2100	21,255	165
11 AM	2100	21,420	165
12 PM	2150	21,585	165
1 PM	2150	21,750	165
2 PM	2150	21,915	165
3 PM	2200	22,081	166
4 PM	2200	22,247	166
5 PM	2200	22,413	166
11-22-09			
10 AM	2100	22,576	163
11 AM	2150	22,738	162
12 PM	2150	22,899	161
1 PM	2150	23,055	156
2 PM	2150	23210	155
11-23-09			
10:30 AM	2050	23,370	160
11:30 AM	2100	23,529	159
12:30 PM	2150	23,688	159
1:30 PM	2150	23,850	162
2:30 PM	2150	24,012	162
3:30 PM	2150	24,171	159
4:30 PM	2150	24,330	159
5:30 PM	2150	24,489	159
6:30 PM	2150	24,649	160
7:30 PM	2150	24,809	160
8 PM	2150	24,890	81

11/13	Pressure	Meter	BBL per
2:00	2200	13349	153
3:00	2200	13501	152
11-14-09			
1:PM	2050	13,670	169
2:PM	2100	13,834	164
3:PM	2100	13,997	163
4:PM	2150	14,161	164
5:PM	2150	14,327	166
11-16-09			
10:30 AM	2000	14490	163
11:30 AM	2050	14,654	164
12:30 PM	Pump off	Elect. out	
1:30 PM	2100	14816	162
2:00 PM	2100	14,978	162
3:00 PM	2150	15,148	170
4:00 AM	2150	15,305	157
5:00 PM	2150	15463	158
11-17-09			
10 AM	2050	15,637	174
11 AM	2100	15,799	162
12 PM	2100	15,962	163
1 PM	2150	16,125	163
2 PM	2150	16,288	163
3 PM	2150	16,452	164
4 PM	2150	16616	164
5 PM	2150	16,766	150
11/18			
9:00	2100	16913	147
10:00	2100	17104	191
11:00	2150	17277	173
12:00	2150	17433	156
1:00	2200	17584	157

	Pressure	Meter	BBls per hr
2:00	2200	17752	168
3:00	2200	17961	159
4:00	2200	18065	154
11/19			
8:30	2100	18249	184
9:30	2150	18401	152
10:30	2150	18575	174
11:30	2200	18745	170
12:30	2200	18905	160
1:30	2200	19065	160
2:30	2200	19239	174
3:30			
4:30	2200	19591	
11-20			
9AM	2100	19604	137
	2250	19926	185
	2200	20091	165
	2200	20248	157
	2200	20439	191
	2200	20601	162
	2200	20747	146
4 PM	2200	20948	201
5 PM	2200	21090	142

24,890

	Pressure	Meter	BBLs Per hr.
11-24-09	~~2100~~		
5 AM	2100	25,061	171
6 AM	2150	25,220	159
7 AM	2150	25,380	160
8 AM	2150	25,541	161
9 AM	2150	25,700	159
10 AM	2150	25,851	151
11 AM	2150	26,001	150
12 PM	2150	26,150	149
1 PM	2150	26,306	156
2 PM	2150	26,464	158
3 PM	2150	26,622	158
4 PM	2150	26,782	160
5 PM	2150	26946	164
6 PM	2150	27102	156
7 PM	2150	27247	145
8 PM	2150	27424	177
9 PM	2150	27588	164
10 PM	2200	27749	161
11 PM	2200	27902	153
12 AM	2150	28064	162
11-25-09		~~[illegible]~~	
1 AM	2200	28259	~~195~~
2 AM	2150	28426	167
3 AM		28574	148
4 AM	2150	28723	~~29~~ 149
5 AM	2150	~~28857~~ 28878	~~177~~ 155
6 AM	2150	29034	~~177~~ 156
7 AM			
8 AM			
9 AM			
10 AM			
11 AM	Start Pumps		

29,034

	Pressure	Meter	BBLs Per HR
12 PM	2050	29,194	160
1 PM	2100	29,336	142
2 PM	2100	29,489	153
3 PM	2100	29,642	153
4 PM	2100	29,795	153
5 PM	2100	29,948	153
6 PM	2150	30,098	150
7 PM	2150	30267	169
8 PM	2150	30404	137
9 PM	2150	30561	157
10 PM	2150	30710	149
11 PM	2150	30873	163
12 AM	2150	31017	144
11-26-09			
1 AM	2150	31213	196
2 AM			
3 AM	2150	31475	262
4 AM	2150	31638	163
5 AM	2150	31782	144
6 AM	~~210~~		
7 AM			
11/26/09			
10 AM	2150	31930	148
11 AM	2100	32104	174
12 PM	2100	32258	154
1 PM	2100	32417	159
2 PM	2100	32575	158
11-27-09	~~2000~~		
6:30 AM	2000	32729	154
7:30 A	2050	32868	139

146

32868

11/27/09	Pressure	Meter		BBL per hr
8:30 AM	20 50	33019		151
9:30	21 00	33142		123
10:30	2100	33282		140
11:30	2100	33430		148
12:30 pm	2100	33578		148
1:30	2100	33699		121
230	2100	33838		139
330	2100	33979		141
430	2100	34125		146
530	2100	34263		138
6:30	2100	34399		136
7:30	2100	34533		134
8:30	2100	34669		136
9:30	2100	34819		150
10:30	2100	34948		129
11:30	2100	35091		143
11/28/09				
12:30 AM	2100	35224		133
1:30	2150	35346		122
2:30	2150	35473	Turned Pump off	127
3:30	2000	35473		-0-
11-28-09				
10:30 AM	2050	35593		120
11:30 AM	2050	35714		121
12:30 PM	2050	35839		125
1:30 PM	2100	35963		124
2:30 PM	2100	36088		125
3:30 PM	2100	36,211		123
4:30 PM	2100	36,332		121
5:30 PM	2100	36,453		121
6 PM	2100	36 514		61

12.5 hrs

36,514

	Pressure	Meter	BBls Per Hr
11-29-09			
9:AM	2,000	36,653	139
10: AM	2,000	36,777	124
11: AM	2,050	36,900	123
12: PM	2,050	37,021	121
1: PM	2,050	37,143	122
2: PM	2,050	37,265	122
3: PM	2,050	37,386	121
4: PM	2,100	37,508	122
5: PM	21,00	37,630	122
11-30-09			
12: PM	1950	37,760	130
1: PM	1900	37,888	128
2: PM	2050	38,012	124
3: PM	2050	38,135	123
4: PM	2050	38,256	121
5: PM	2050	38,381	125
6 PM			
7 PM	2100	38,642	
8 PM	2050	38 762	120
9 PM	2050	38892	130
10 PM	2100	39014	122
11 PM	2100	39 137	123
12 AM	2100	39 263	126
12-01-09			
1 AM	2100	120	120
2 AM	2100	246	126
3 AM	2100	370	124
4 AM	2100	495	125
5 AM	2100	616	121
6 AM	2100	747	131
7 AM			

146

36,514

	Pressure	Meter	BBls Per hr
11-29-09			
9:AM	2,000	36,653	139
10: AM	2,000	36,777	124
11: AM	2,050	36,900	123
12: PM	2,050	37,021	121
1: PM	2,050	37,143	122
2: PM	2,050	37,265	122
3: PM	2,050	37,386	121
4: PM	2,100	37,508	122
5: PM	21,00	37,630	122
11-30-09			
12: PM	1950	37,760	130
1: PM	1900	37,888	128
2: PM	2050	38,012	124
3: PM	2050	38,135	123
4: PM	2050	38,256	121
5: PM	2050	38,381	125
6 PM			
7 PM	2100	38,642	
8 PM	2050	38762	120
9 PM	2050	38892	130
10 PM	2100	39014	122
11 PM	2100	39137	123
12 AM	2100	39263	126
12-01-09			
1 AM	2100	120	120
2 AM	2100	246	126
3 AM	2100	370	124
4 AM	2100	495	125
5 AM	2100	616	121
6 AM	2100	747	131
7 AM			

DEC 09

MAX 2300

AVG 2160

Total 221

Prev 477,300

146

747

	Pressure	Meter	BBLs Per hr.
12-01-09			
5:PM	2,000	882	135
6: PM	2050	1,016	134
7: PM	2050	1154	138
8: PM	2050	1290	136
9: PM	2050	1421	131
10: PM	2050	~~1552~~ 1552	131
11: PM	2050	1685	133
12: AM	2050	1816	131
12-02-09			
1:AM	2050	1948	132
2: AM	2050	2080	132
3: AM	2050	2211	131
4: AM	2050	2345	134
5: AM	2050	2473	128
Down pump			
11:00	2200	2627	154
12:00	2250	2781	154
1 pm	2250	3000	219
2:00	2250	3169	169
3:00	2250	3370	201
4:00	2250	3559	189
5:00	2250	3750	191
6:00	2250	3949	199
7:00	2300	4132	183
8:00	2300	4322	190
9:00	2300	4511	189
10:00	2300	4708	197
11:00	2300	4899	191
12:00	2300	5090	191
	2-3-09		

12-3/09	Pressure	Meter	BBLS p/h
1:00 AM	2300	5285	195
2 AM	2300	5472	187
3 AM	2300	5665	193
off 4 AM	2300	5857	192
12/3			
10 AM	2250	6087	230
11 AM	2250	6288	200
12 AM	2250	6478	190
1 pm	2300	6670	192
2 pm	2300	6880	210
3 pm	2300	7079	199
4 pm	2300	7257	178
5 pm	2300	7481	224
6 pm	2300	7662	181
7 PM	2300	7843	181
8 PM	2300	8039	196
9 PM	2300	8231	192
10 PM	2300	8426	195
11 PM	2300	8626	200
12 PM	2300	8826	200
12 4 09			
1 AM	2300	9027	201
2 AM	2300	9228	201
3 AM	2300	9433	205
off 4 AM	2300	9636	206
12-4	PUMP OFF		
1:30 pm	2200	9863	227
2:30	2200	10057	194
3:30	2200	10248	191
4:30	2200 60	10434	186

146

12-06-09		10,434	
	Pressure	Meter	BBLs Per Hr.
11:AM	2100	10,599	165
12:PM	2150	10,765	166
1:PM	2150	10,932	167
2:PM	2150	11,097	165
3:PM	2200	11,262	165
4:PM	2200	11,427	165
5:PM	2200	11,592	165
12-07-09			
8:30 AM	2100	11,753	161
9:30 AM	2150	11,938	185
10:30 AM	2150	12,127	189
11:30 AM	2200	12,318	191
12:30 PM	2200	12,506	188
1:30 PM	2200	12,694	188
2:30 PM	2200	12,883	189
3:30 PM	2200	13,076	193
4:30 PM	2250	13,272	196
12-9-09			
11:00	2100	13472	200
12:00	2150	13675	203
1:00	2150	13869	194
2:00	2200	14056	187
3:00	2200	14236	180
4:00	2200	14424	188
12-10-09			
10:00	2100	14581	157
11:00		14764	183
12:00	2150	14944	180
1:00	2200	15145	201
2:00	2200 86	15325	180

165.428

15,325

Pressure		Meter	BBLs Per HR.
12-11-09			
11:AM	2050	15,494	169
12:PM	2100	15672	178
1:PM	2150	15851	179
2:PM	2150	16038	187
3:PM	2150	16,227	189
4:PM	2150	16,418	191
5:PM	2150	16,611	193
12-12-09			
10:AM	2100	16,803	192
11:AM	2150	16,984	181
12:PM	2150	17,168	184
1:PM	2150	17,355	187
2:PM	2150	17,543	188
3:PM	2200	17,734	191
12-13-09			
11:AM	2100	17,930	196
12:PM	2150	18,114	184
1:PM	2150	18,297	183
2:PM	2150	18,480	183
3:PM	2150	18,663	183
12-15-09			
10:AM	2050	18855	192
11:AM	2100	19033	178
off 12:PM	2150	19213	180
1:PM	2150	19393	180
2:PM	2150	19574	181
3:PM	2150	19754	180
4:PM	2150	19936	182

146

19936

12/17	Pressure	Meter	BBLS
10:00	2050	20084	148
11:00	2100	20257	173
12:00	2150	20436	179
1:00	2150	20615	179
2:00	2150	20780	165
3:00	2200	20960	180
4:00	2200	21133	173
12/18/09			
12:00	2200	21334	201
1 PM	2200	21515	181
2 PM	2150	21701	186
3 PM	2150	21880	179
4 PM	2150	22059	179
12-19-09			
9 AM	2050	22,228	169
10 AM	2100	22,414	186
11 AM	2150	22,602	188
12 PM	2150	22,791	189
1 PM	2150	22,978	187
2 PM	2000	23,049	71
3 PM	2000	23,120	71
4 PM	2000	23,201	81
12,2099			
12-21			
11:00	2050	23374	173
12:00	2100	23,524	150
1 PM	2100	23,683	159
2 PM	2150	23,843	160
3 PM	2150	24,003	160
4 PM	2150	24 163	160
5 PM	2150	24,323	160

24,323

PRESSURE		Meter	BBLS PER HR
12-22-09			
8:AM	2050	24,493	170
9: AM	2100	24,663	170
10: AM	2150	24,823	160
11: AM	2150	24,985	162
12: PM	2150	25,146	161
1: PM	2150	25,307	161
2: PM	2150	25,466	159
3: PM			
4: PM	2150	25,589	123
5: PM	2150	25,728	139
12-23			
11:30	2150	25875	147
12:30	2200	26036	161
1:30pm	2200	26196	160
2:30pm	2200	26350	160
3:30pm	2250	26525	169
4:30pm	2250	26685	160
5pm			
12-24			
8A	2150	26860	175
9A	2200	27017	157
10A	2200	27185	168
11A	2200	27348	163
12A	2250	27509	161
1P	2250	27680	171
2P	2250	27838	158
3P	2250	28011	173
4P	2150 162	28051	

28051

	Pressure	Meter	BBLs Per Hr
12-27-09			
11:30 AM	2000	28,220	169
12:30 PM	2050	28,376	156
1:30 PM	2100	28,535	159
2:30 PM	2150	28,694	159
3:30 PM	2150	28,854	160
4:30 PM	2150	29,014	160
5:PM	2150	29,094	80
12-28-09			
1:30 PM	2050	29,259	160
2:30 PM	2100	29,409	155
3:30PM	2150	29,565	156
4:30PM	2150	29,721	156
5 PM	2150	29,799	78
12-29-09			
9: AM	2050	29,959	160
10: AM	2100	30,112	153
11: AM	2150	30,267	155
12: PM	2150	30422	155
1: PM	2150	30,577	155
2: PM	2150	30,733	156
3: PM	2150	30,888	155
4: PM	2150	31,039	151
5: PM			
12,30,09			
12:00	2150	31197	158
1:00	2150	31350	153
2 pm	2150	31520	170
3 pm	2150	31666	146
4 pm	2200	31824	158
5p	2150	31965	141

12-31	Pressure	31965 Meter	BBL P.H
~~12-31~~ 12	2050	32118	153
1P	2150	32272	154
2pm	2150	32418	146
3pm	2150	32586	168
4pm	2150	32735	149
5pm	2150	32890	155
1-1-10		0	
11:30	2100	180	
12:30p	2150	331	151
1:30p	2150	486	155
2:30	2150	644	158
3:30	2200	791	147
4:30	2200	948	157
01-02-09			
12:PM	2050	1,083	135
1:PM	2050	1,239	156
2:PM	2100	1,396	157
3:PM	2150	1,553	157
4:PM	2150	1,709	156
5:PM	2150	1,866	157
6:PM	2150	2,063	197
01-05-10			
4:PM	1950	2,400	337
5:PM	2000	2,557	157
1-6-10			
11Am	2050	2714	157
12	2100	2863	149
1Pm	2100	3019	156
2Pm	2100	3178	159
3Pm	2150	3324	146
4Pm	2150	3477	153

12-31	Pressure	31965 Meter	BBL P.H.
12	2050	32418	153
1P	2150	32272	154
2pm	2150	32418	146
3pm	2150	32586	168
4pm	2150	32735	149
5pm	2150	32890	155
1-1-10		0	
11:30	2100	180	
12:30p	2150	331	151
1:30p	2150	486	155
2:30	2150	644	158
3:30	2200	791	147
4:30	2200	948	157
01-02-09			
12:PM	2050	1,083	135
1:PM	2050	1,239	156
2:PM	2100	1,396	157
3:PM	2150	1,553	157
4:PM	2150	1,709	156
5:PM	2150	1,866	157
6:PM	2150	2,063	197
01-05-10			
4:PM	1950	2,400	337
5:PM	2000	2,557	157
1-6-10			
11Am	2050	2714	157
12	2100	2863	149
1pm	2100	3019	156
2 Pm	2100	3178	159
3Pm	2150	3324	146
4Pm	2150	3477	153

146

APPENDIX F

2007 to 2009 Key UIC-CLI-005 Injection Well Summary Reports

2009 Key UIC-CLI-005 Injection Well Report

protection code: 1111

Period	Injection Pressure (psig)			Annuals Pressure (psig)			Annuals Volumes Gallons		Injection Flow Rates (bbls/day)			VOLUMES in BBLs				Pressure Limiting Device	Monthly Operational Notes:
Year																	
Prior Year															Carry-Over 11,980,838		
2009	Max psig	Min psig ****	Avg psig	Max psig	Min psig	Avg psig	(+)Gain	(-)Loss	Max bbls/day	Min bbls/day	Avg bbls/day	Month Class I (non-exempt)	Monthly Total	YTD	Life of Well	Notes:	Notes:
Jan	2400	1700	2176	0	0	0	na	na	2970	0	1668	720	51717	51,717	12,032,555		
Feb	2400	1650	2200	0	0	0	na	na	2403	0	1254	880	35107	86,824	12,067,662		
Mar	2400	1650	2243	0	0	0	na	na	2476	0	867	480	25999	112,823	12,093,661		
Apr	2300	1550	2189	0	0	0	na	na	1750	0	517	720	16016	128,839	12,109,677		
May	2275	1550	2293	0	0	0	na	na	2036	0	775	2160	24025	152,864	12,133,702		
Jun	2500	1650	2293	0	0	0	na	na	3119	0	1044	1120	31311	184,175	12,165,013	6/07 Murphy SW vibration-issue	Pump over 2400 PSIG-reset SW
Jul	2400	1600	2262	0	0	0	na	na	2145	0	1182	2560	36656	220,831	12,201,669		
Aug	2350	1700	2214	0	0	0	na	na	1870	0	907	1520	28124	248,955	12,229,793		
Sep	2350	1600	2184	0	0	0	na	na	4554	0	958	2080	28749	277,704	12,258,542		
Oct	2300	1700	2145	0	0	0	na	na	2399	0	1321	800	40952	318,656	12,299,494		
Nov	2250	1700	2129	0	0	0	na	na	3174	0	1309	6340	39263	357,919	12,338,757		
Dec	2300	1700	2160	0	0	0	na	na	3736	0	1061	5520	32890	390,809	12,371,647		
Summary		****	2207									24900					

Notes:

Injection Pressures: Injection pressures are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

Annuals Pressures: Annuals pressures are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

Annuals Volumes: Annuals volumes are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

Injection flow rates: Injection Flow rates (volume/time) are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

Injection Volumes: Injection Volumes (bbls) are recorded hourly and a daily total is calcualated during daily operations- The monthly max,min and average values are taken from these totaled daily logs.

Pressure Limiting Device: Will be checked monthly with notes and logged.

Operational Notes: A daily inspection logged is maintained. The monthly summary of significate event is recorded in this space.

**** Static well shut-in pressures

2008 Key UIC-CLI-005 Injection Well Report

protection code: 1111

Period	Injection Pressure (psig)			Annuals Pressure (psig)			Annuals Volumes Gallons		Injection Flow Rates (bbls/day)			VOLUMES in BBLs				Pressure Limiting Device	Monthly Operational Notes:
Year															Carry-Over		
Prior Year															11,212,466		
2008	Max psig	Min psig	Avg psig	Max psig	Min psig	Avg psig	(+)Gain	(-)Loss	Max bbls/da	Min bbls/day	Avg bbls/day	Month Class I (non-exempt)	Monthly Total	YTD	Life of Well	Notes:	Notes:
Jan	1600	1320	1560	0	0	0	na	na	4324	514	2780	720	86166	86,166	11,298,632		
Feb	test	test	test	0	0	0	na	na	3875	520	2236	1280	62617	148,783	11,361,249		
Mar	2700	1600	2160	0	0	0	na	na	3862	0	2385	3600	71535	220,318	11,432,784		
Apr	2160	1500	2100	0	0	0	na	na	4141	1374	2801	39680	86835	307,153	11,519,619		
May	2200	1500	2100	0	0	0	na	na	973	0	547	1760	16967	324,120	11,536,586		
Jun	2100	1500	1950	0	0	0	na	na	2753	0	598	1520	17925	342,045	11,554,511		
Jul	2230 *	1500 *	2020 *	0	0	0	na	na	4140	0	1303	2400	40386	382,431	11,594,897		
Aug	2230 *	1500 *	2020 *	0	0	0	na	na	4142	799	3074	1840	95294	477,725	11,690,191		
Sep	2230 *	1500*	2020 *	0	0	0	na	na	3488	0	2091	1920	62730	540,455	11,752,921		
Oct	2400	1500	2100	0	0	0	na	na	4512	0	3048	1200	94482	634,937	11,847,403		
Nov	2300	1500	2100	0	0	0	na	na	4691	633	2484	1760	74513	709,450	11,921,916		
Dec	2400	1600	2100	0	0	0	na	na	3400	811	1901	2320	58922	768,372	11,980,838		
Summary	2233	1503	2021														

Notes:

Injection Pressures: Injection pressures were taken from continuous pressure chart recording chart.

* estimated by using yearly average

Annuals Pressures: Annuals pressures were taken from continuous pressure chart recording chart.

Annuals Volumes: Annuals volumes were taken from contineous pressure chart recording chart.

Injection flow rates: Injection Flow rates (volume/time) are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

Injection Volumes: Injection Volumes (bbls) are recorded hourly and a daily total is calcualated during daily operations- The monthly max,min and average values are taken from these totaled daily logs.

Pressure Limiting Device: Will be checked monthly with notes logged.

Operational Notes: A daily inspection logged is maintained. The monthly summary of significate event is recorded in this space.

2007 Key UIC-CLI-005 Injection Well Report

protection code: 1111

Period	Injection Pressure (psig)			Annuals Pressure (psig)			Annuals Volumes Gallons:		Injection Flow Rates (bbls/day)			VOLUMES in BBLs				Pressure Limiting Device	Monthly Operational Notes:
Year																	
Prior Year															Carry-Over 10,378,063		
2007	Max psig	Min psig ****	Avg psig	Max psig	Min psig	Avg psig	(+)Gain	(-)Loss	Max bbls/day	Min bbls/day	Avg bbls/day	Month Class I (non-exempt)	Monthly Total	YTD	Life of Well	Notes:	Notes:
Jan	2580	2000	2260	0	0	0	na	na	4103	685	2406	400	74,571	74,571	10,452,634		
Feb	2400	1800	2190	0	0	0	na	na	4014	1293	2546	400	71,279	145,850	10,523,913		
Mar	2350	1800	2230	0	0	0	na	na	4019	1528	3663	560	109,889	255,739	10,633,802		
Apr	2300	1930	2250	0	0	0	na	na	3844	297	2641	640	81,868	337,607	10,715,670		
May	2300	1900	2220	0	0	0	na	na	4040	989	2608	720	80,853	418,460	10,796,523		
Jun	2250	1900	2180	0	0	0	na	na	3759	1638	2583	640	77,504	495,964	10,874,027		
Jul	2260	0 **	2250	0	0	0	na	na	3352	0	2432	880	75,386	571,350	10,949,413		
Aug	2300 *	1900 *	2250 *	0	0	0	na	na	3351	646	2883	800	89,376	660,726	11,038,789		
Sep	2350 *	1950 *	2300 *	0	0	0	na	na	3100	1809	2688	640	80,650	741,376	11,119,439		
Oct	2300	1800	2100	0	0	0	na	na	2792	0	1714	640	53,119	794,495	11,172,558		
Nov	2100	1800	1970	0	0	0	na	na	1513	0	598	1120	17,943	812,438	11,190,501		
Dec	2700	1800	2160	0	0	0	na	na	4338	0	709	720	21,965	834,403	11,212,466		
Summary		****															

Notes:

Injection Pressures: Injection pressures were taken from contineous pressure recording chart.
* etimated: ** pump down **** Wellhead shut-in pressure
Annuals Pressures: Annuals pressures were taken from contineous pressure recording chart.

Annuals Volumes: Annuals volumes are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

Injection flow rates: Injection Flow rates (volume/time) are recorded hourly during daily operations- The monthly max,min and average values are taken from these logs.

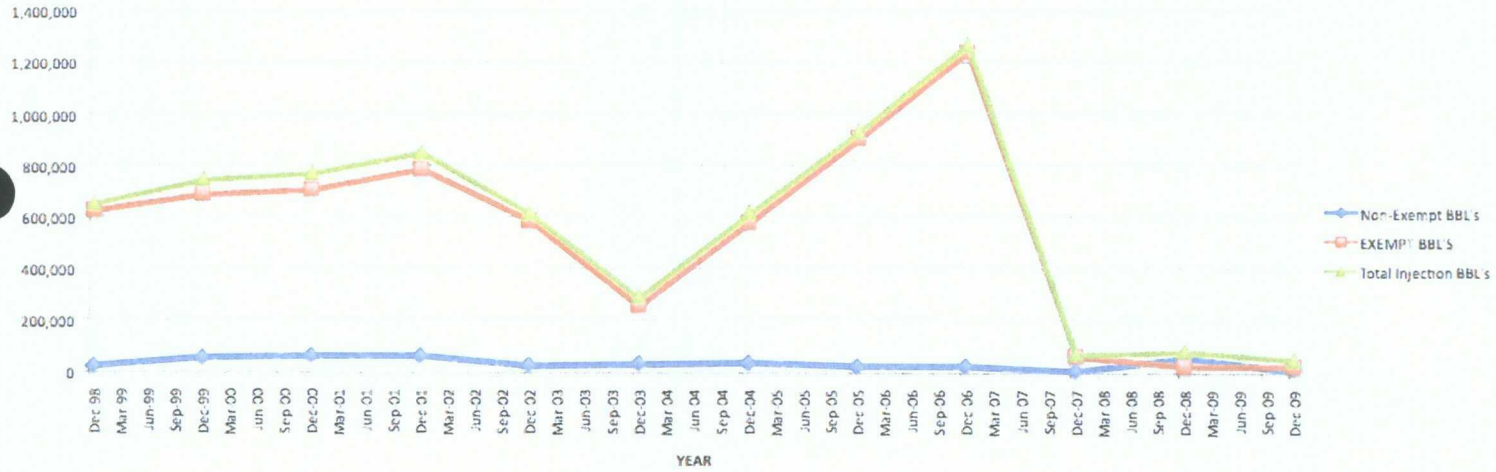
Injection Volumes: Injection Volumes (bbls) are recorded hourly and a daily total is calcualated during daily operations- The monthly max,min and average values are taken from these totaled daily logs.

Pressure Limiting Device: Will be checked monthly with notes logged.

Operational Notes: A daily inspection logged is maintained. The monthly summary of significate event is recorded in this space.

APPENDIX G

KEY FARMINGTON CLASS I INJECTION WELL UIC-5
VOLUMES CHART BBL'S
1998-2009



APPENDIX H

Appx H

4/13/07 * Not Consistent RCRA Testing

7/3/07

4/23/08

6/3/08

6/17/08 *

Missing Date 7/29/08 OK

~~8/11/08~~

4/12/10 Exceed Benz. 0.67 PPM

4/12/10

TABLE I	Sample Date	4/13/2007
	COC Sample ID	Injection Pump AF
	Report Date	4/30/2007
Analysis	Method/Reference	Concentration
VOCs		
Benzene	EPA Method 8260B	0.0169 mg/L
1,2-Dichloroethane	EPA Method 8260B	<0.0001 mg/L
2-Butanone (Methyl Ethyl Ketone)	EPA Method 8021	0.0288 mg/L
Chloroform	EPA Method 8260B	<0.0001 mg/L
TCLP Phenols		
o-Cresol	EPA Method 8040	0.080 mg/L
p,m-Cresol	EPA Method 8040	0.092 mg/L
TCLP Nitroaromatics and Cyclic Ketones		
Hexachloroethane	EPA Method 8091	0.019 mg/L
Nitrobenzene	EPA Method 8091	<0.012 mg/L
2,4-Dinitrotoluene	EPA Method 8091	<0.012 mg/L
TCLP Metals		
Arsenic	3010, 3020 / 6010B	0.038 mg/L
Barium	3010, 3020 / 6010B	1.26 mg/L
Cadmium	3010, 3020 / 6010B	<0.001 mg/L
Chromium	3010, 3020 / 6010B	0.001 mg/L
Lead	3010, 3020 / 6010B	0.001 mg/L
Mercury	3010, 3020 / 6010B	<0.001 mg/L
Selenium	3010, 3020 / 6010B	0.065 mg/L
Silver	3010, 3020 / 6010B	<0.001 mg/L
RCI		
Reactivity	40 CFR 261 Sec. 261.23	Negative
Corrosivity	40 CFR 261 Sec. 261.22	8.13 s.u.
Ignitability	40 CFR 261 Sec. 261.21	Negative

NOTES:

< number is the detection limit

TABLE 2	Sample Date	7/3/2007
	COC Sample ID	Injection Pump AF
	Report Date	7/10/2007
Analysis	Method/Reference	Concentration
VOCs		
Benzene	EPA Method 8260B	0.0307 mg/L
1,2-Dichloroethane	EPA Method 8260B	<0.0001 mg/L
2-Butanone (Methyl Ethyl Ketone)	EPA Method 8260B	0.0567 mg/L
Chloroform	EPA Method 8260B	0.0265 mg/L
TCLP Phenols		
o-Cresol	EPA Method 8270	1.38 mg/L
p,m-Cresol	EPA Method 8270	0.649 mg/L
TCLP Nitroaromatics and Cyclic Ketones		
Hexachloroethane	EPA Method 8270	<0.012 mg/L
Nitrobenzene	EPA Method 8270	0.220 mg/L
2,4-Dinitrotoluene	EPA Method 8270	0.019 mg/L
TCLP Metals		
Arsenic	3010, 3020 / 6010B	<0.001 mg/L
Barium	3010, 3020 / 6010B	4.41 mg/L
Cadmium	3010, 3020 / 6010B	<0.001 mg/L
Chromium	3010, 3020 / 6010B	0.003 mg/L
Lead	3010, 3020 / 6010B	0.004 mg/L
Mercury	3010, 3020 / 6010B	<0.001 mg/L
Selenium	3010, 3020 / 6010B	<0.001 mg/L
Silver	3010, 3020 / 6010B	<0.001 mg/L
RCI		
Reactivity	40 CFR 261 Sec. 261.23	Negative
Corrosivity	40 CFR 261 Sec. 261.22	7.38 s.u.
Ignitability	40 CFR 261 Sec. 261.21	Negative

NOTES:

< number is the detection limit

TABLE 3	Sample Date	4/23/2008
	COC Sample ID	Injection Well
	Report Date	4/30/2008
Analysis	Method/Reference	Concentration
VOCs		
Benzene	EPA Method 8260B	0.1764 mg/L
1,2-Dichloroethane	EPA Method 8260B	0.0042 mg/L
2-Butanone (Methyl Ethyl Ketone)	EPA Method 8260B	0.0158 mg/L
Chloroform	EPA Method 8260B	0.0024 mg/L
TCLP Phenols		
o-Cresol	EPA Method 8270	<0.020 mg/L
p,m-Cresol	EPA Method 8270	0.109 mg/L
TCLP Nitroaromatics and Cyclic Ketones		
Hexachloroethane	EPA Method 8270	<0.012 mg/L
Nitrobenzene	EPA Method 8270	<0.012 mg/L
2,4-Dinitrotoluene	EPA Method 8270	<0.012 mg/L
TCLP Metals		
Arsenic	3010, 3020 / 6010B	<0.001 mg/L
Barium	3010, 3020 / 6010B	11.4 mg/L
Cadmium	3010, 3020 / 6010B	<0.001 mg/L
Chromium	3010, 3020 / 6010B	0.224 mg/L
Lead	3010, 3020 / 6010B	0.001 mg/L
Mercury	3010, 3020 / 6010B	<0.001 mg/L
Selenium	3010, 3020 / 6010B	0.011 mg/L
Silver	3010, 3020 / 6010B	0.047 mg/L
RCI		
Reactivity	40 CFR 261 Sec. 261.23	Negative
Corrosivity	40 CFR 261 Sec. 261.22	6.67 s.u.
Ignitability	40 CFR 261 Sec. 261.21	Negative

NOTES:

< number is the detection limit

TABLE 4	Sample Date	6/3/2008	
	COC Sample ID	W. Leak Detector	
	Report Date	6/9/2010	
Analysis	Method/Reference	Concentration in mg/L	Concentration in ug/L
BTEX			
Benzene	EPA Method 8021	0.0047 mg/L	4.7 ug/L
Toluene	EPA Method 8021	0.0235 mg/L	23.5 ug/L
Ethylbenzene	EPA Method 8021	0.0022 mg/L	2.2 ug/L
p,m-Xylenes	EPA Method 8021	0.0266 mg/L	26.6 ug/L
o-Xylenes	EPA Method 8021	0.0079 mg/L	7.9 ug/L
Total BTEX	EPA Method 8021	0.0649 mg/L	64.9 ug/L
Cation/Anion Analysis			Molar Equivalent
pH	EPA 600/4-79-020	7.12 s.u.	
Conductivity @ 25° C	EPA 600/4-79-020	28,600 umhos/cm	
TDS @ 180°C	EPA 600/4-79-020	18,000 mg/L	
TDS (calculated)	EPA 600/4-79-020	18,216 mg/L	
SAR	EPA 600/4-79-020	94.6 ratio	
Total Alkalinity as CaCO3	EPA 600/4-79-020	1,520 mg/L	
Total Hardness as CaCO3	EPA 600/4-79-020	798 mg/L	
Bicarbonate as CaCO3	EPA 600/4-79-020	1,520 mg/L	24.91 meq/L
Carbonate as CaCO3	EPA 600/4-79-020	<0.1 mg/L	0.00 meq/L
Hydroxide as CaCO3	EPA 600/4-79-020	<0.1 mg/L	0.00 meq/L
Nitrate Nitrogen	EPA 600/4-79-020	5.5 mg/L	0.09 meq/L
Nitrite Nitrogen	EPA 600/4-79-020	0.050 mg/L	0.00 meq/L
Chloride	EPA 600/4-79-020	8,800 mg/L	248.25 meq/L
Fluoride	EPA 600/4-79-020	0.36 mg/L	0.02 meq/L
Phosphate	EPA 600/4-79-020	57.0 mg/L	1.80 meq/L
Sulfate	EPA 600/4-79-020	1,270 mg/L	26.44 meq/L
Iron	EPA 600/4-79-020	0.059 mg/L	0.00 meq/L
Calcium	EPA 600/4-79-020	255 mg/L	12.72 meq/L
Magnesium	EPA 600/4-79-020	39.3 mg/L	3.23 meq/L
Potassium	EPA 600/4-79-020	726 mg/L	18.57 meq/L
Sodium	EPA 600/4-79-020	6,120 mg/L	267.09 meq/L
Cation	EPA 600/4-79-020		301.62 meq/L
Anions	EPA 600/4-79-020		301.51 meq/L
Cation/Anion Difference	EPA 600/4-79-020		0.04 %
TPH		Concentration in mg/L	
Gasoline Range (C5-C10)	EPA Method 8015	<0.2 mg/L	
Diesel Range (C10-C28)	EPA Method 8015	<0.1 mg/L	
Total Petroleum Hydrocarbons	EPA Method 8015	<0.1 mg/L	

TABLE 5	Sample Date	6/17/2008	
	COC Sample ID	Main Pond	
	Report Date	6/24/2010	
Analysis	Method/Reference	Concentration in mg/L	Concentration in ug/L
BTEX			
Benzene	EPA Method 8021	0.0201 mg/L	20.1 ug/L
Toluene	EPA Method 8021	0.148 mg/L	148 ug/L
Ethylbenzene	EPA Method 8021	0.242 mg/L	242 ug/L
p,m-Xylenes	EPA Method 8021	0.68 mg/L	680 ug/L
o-Xylenes	EPA Method 8021	0.406 mg/L	406 ug/L
Total BTEX	EPA Method 8021	1.5 mg/L	1,500 ug/L
Cation/Anion Analysis			Molar Equivalent
pH	EPA 600/4-79-020	7.48 s.u.	
Conductivity @ 25° C	EPA 600/4-79-020	32,500 umhos/cm	
TDS @ 180°C	EPA 600/4-79-020	19,700 mg/L	
TDS (calculated)	EPA 600/4-79-020	18,648 mg/L	
SAR	EPA 600/4-79-020	67.9 ratio	
Total Alkalinity as CaCO3	EPA 600/4-79-020	1,500 mg/L	
Total Hardness as CaCO3	EPA 600/4-79-020	1,300 mg/L	
Bicarbonate as CaCO3	EPA 600/4-79-020	1,500 mg/L	24.59 meq/L
Carbonate as CaCO3	EPA 600/4-79-020	<0.1 mg/L	0.00 meq/L
Hydroxide as CaCO3	EPA 600/4-79-020	<0.1 mg/L	0.00 meq/L
Nitrate Nitrogen	EPA 600/4-79-020	1.0 mg/L	0.02 meq/L
Nitrite Nitrogen	EPA 600/4-79-020	<0.01 mg/L	0.00 meq/L
Chloride	EPA 600/4-79-020	10,000 mg/L	282.10 meq/L
Fluoride	EPA 600/4-79-020	1.73 mg/L	0.09 meq/L
Phosphate	EPA 600/4-79-020	16.5 mg/L	0.52 meq/L
Sulfate	EPA 600/4-79-020	85.5 mg/L	1.78 meq/L
Iron	EPA 600/4-79-020	3.72 mg/L	0.13 meq/L
Calcium	EPA 600/4-79-020	448 mg/L	22.36 meq/L
Magnesium	EPA 600/4-79-020	43.3 mg/L	3.56 meq/L
Potassium	EPA 600/4-79-020	1,520 mg/L	38.88 meq/L
Sodium	EPA 600/4-79-020	5,620 mg/L	244.47 meq/L
Cation	EPA 600/4-79-020		309.27 meq/L
Anions	EPA 600/4-79-020		309.09 meq/L
Cation/Anion Difference	EPA 600/4-79-020		0.06 %
TPH		Concentration in mg/L	
Gasoline Range (C5-C10)	EPA Method 8015	8 mg/L	
Diesel Range (C10-C28)	EPA Method 8015	1.8 mg/L	
Total Petroleum Hydrocarbons	EPA Method 8015	9.8 mg/L	

TABLE 6	Sample Date	7/29/2008
	COC Sample ID	Pump After Filter
	Report Date	8/1/2008
Analysis	Method/Reference	Concentration
VOCs		
Benzene	EPA Method 8260B	0.0218 mg/L
1,2-Dichloroethane	EPA Method 8260B	<0.0001 mg/L
2-Butanone (Methyl Ethyl Ketone)	EPA Method 8021 / 8260b	0.0431 mg/L
Chloroform	EPA Method 8260B	0.0282 mg/L
TCLP Phenols		
o-Cresol	EPA Method 8040	0.583 mg/L
p,m-Cresol	EPA Method 8040	0.319 mg/L
TCLP Nitroaromatics and Cyclic Ketones		
Hexachloroethane	EPA Method 8091 / 8270	<0.012 mg/L
Nitrobenzene	EPA Method 8270	<0.012 mg/L
2,4-Dinitrotoluene	EPA Method 8270	<0.012 mg/L
TCLP Metals		
Arsenic	3010, 3020 / 6010B	0.129 mg/L
Barium	3010, 3020 / 6010B	14.8 mg/L
Cadmium	3010, 3020 / 6010B	<0.001 mg/L
Chromium	3010, 3020 / 6010B	0.223 mg/L
Lead	3010, 3020 / 6010B	0.007 mg/L
Mercury	3010, 3020 / 6010B	<0.001 mg/L
Selenium	3010, 3020 / 6010B	0.049 mg/L
Silver	3010, 3020 / 6010B	0.004 mg/L
RCI		
Reactivity	40 CFR 261 Sec. 261.23	Negative
Corrosivity	40 CFR 261 Sec. 261.22	5.44 s.u.
Ignitability	40 CFR 261 Sec. 261.21	Negative

NOTES:

< number is the detection limit

TABLE 7	Sample Date	4/12/2010	
	COC Sample ID	SWD	
	Report Date	4/14/2010	
Analysis	Method/Reference	Concentration in mg/L	Concentration in ug/L
VOCs			
Benzene	EPA Method 8260B	0.667 mg/L	667 ug/L
Toluene	EPA Method 8260B	5.14 mg/L	5,140 ug/L
Ethylbenzene	EPA Method 8260B	0.887 mg/L	887 ug/L
Xylenes, total	EPA Method 8260B	3.52 mg/L	3,520 ug/L
1,2,4-Trimethylbenzene	EPA Method 8260B	0.76 mg/L	760 ug/L
1,3,5-Trimethylbenzene	EPA Method 8260B	1.06 mg/L	1,060 ug/L
1,2-Dichloroethane	EPA Method 8260B	0.0188 mg/L	18.8 ug/L
Naphthalene	EPA Method 8260B	0.178 mg/L	178 ug/L
1-Methylnaphthalene	EPA Method 8260B	0.083 mg/L	83.0 ug/L
Bromobenzene	EPA Method 8260B	0.0884 mg/L	88.4 ug/L
Isopropylbenzene	EPA Method 8260B	0.745 mg/L	745 ug/L
4-Isopropyltoluene	EPA Method 8260B	0.0973 mg/L	97.3 ug/L
n-Propylbenzene	EPA Method 8260B	0.183 mg/L	183 ug/L
Styrene	EPA Method 8260B	2.206 mg/L	2,206 ug/L
Metals			
Arsenic	3010, 3020 / 6010B	--- mg/L	
Barium	3010, 3020 / 6010B	8.23 mg/L	
Cadmium	3010, 3020 / 6010B	<0.001 mg/L	
Chromium	3010, 3020 / 6010B	0.146 mg/L	
Lead	3010, 3020 / 6010B	0.006 mg/L	
Mercury	3010, 3020 / 6010B	0.09 mg/L	
Selenium	3010, 3020 / 6010B	0.003 mg/L	
Silver	3010, 3020 / 6010B	0.026 mg/L	
Mercury	3010, 3020 / 6010B	0.00009 mg/L	0.09 ug/L
RCI			
Reactivity	40 CFR 261 Sec. 261.23	Negative	
Corrosivity	40 CFR 261 Sec. 261.22	8.33 s.u.	
Ignitability	40 CFR 261 Sec. 261.21	Negative	
Cation/Anion Analysis			Molar Equivalent
pH	EPA 600/4-79-020	8.38 s.u.	
Conductivity @ 25° C	EPA 600/4-79-020	17,600 umhos/cm	
TDS @ 180°C	EPA 600/4-79-020	10,800 mg/L	
TDS (calculated)	EPA 600/4-79-020	10,830 mg/L	
SAR	EPA 600/4-79-020	50.6 ratio	
Total Alkalinity as CaCO3	EPA 600/4-79-020	1,340 mg/L	
Total Hardness as CaCO3	EPA 600/4-79-020	969 mg/L	
Bicarbonate as CaCO3	EPA 600/4-79-020	1,340 mg/L	21.96 meq/L
Carbonate as CaCO3	EPA 600/4-79-020	<0.1 mg/L	0.00 meq/L
Hydroxide as CaCO3	EPA 600/4-79-020	<0.1 mg/L	0.00 meq/L
Nitrate Nitrogen	EPA 600/4-79-020	0.900 mg/L	0.01 meq/L
Nitrite Nitrogen	EPA 600/4-79-020	0.037 mg/L	0.00 meq/L
Chloride	EPA 600/4-79-020	4,850 mg/L	136.82 meq/L
Fluoride	EPA 600/4-79-020	2.06 mg/L	0.11 meq/L
Phosphate	EPA 600/4-79-020	2.94 mg/L	0.09 meq/L
Sulfate	EPA 600/4-79-020	1,020 mg/L	21.24 meq/L
Iron	EPA 600/4-79-020	1.65 mg/L	0.06 meq/L
Calcium	EPA 600/4-79-020	362 mg/L	18.06 meq/L
Magnesium	EPA 600/4-79-020	15.5 mg/L	1.28 meq/L
Potassium	EPA 600/4-79-020	142 mg/L	3.63 meq/L
Sodium	EPA 600/4-79-020	3,620 mg/L	157.47 meq/L
Cation	EPA 600/4-79-020		180.44 meq/L
Anions	EPA 600/4-79-020		180.23 meq/L
Cation/Anion Difference	EPA 600/4-79-020		0.12 %

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

April 30, 2007

Mr. Ray Rupp
Key Energy Service, Inc.
P.O. Box 900
Farmington, NM 87499

Phone: (505) 327-0416

Client No.: 98065-004

Dear Mr. Rupp,

Enclosed are the analytical results for the sample collected from the location designated as "Injection Well". One water sample was collected by Key Energy Service designated personnel on 04/13/07, and received by the Envirotech laboratory on 04/13/07 for TCLP W/O Herbicides and Pesticides.

The sample was documented on Envirotech Chain of Custody No. 2483. The sample was assigned Laboratory No. 41030 (Injection Pump AF) for tracking purposes.

The sample was analyzed 04/17/07 - 04/28/07 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters

Christine M. Walters
Laboratory Coordinator / Environmental Scientist

enc.

C:/files/labreports/key.wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

April 19, 2007 04-13-07

Mr. Ray Rupp
Key Energy Service, Inc.
P.O. Box 900
Farmington, NM 87499

Phone: (505) 327-0416

Client No.: 98065-004

Dear Mr. Rupp,

Enclosed are the analytical results for the samples collected from the location designated as "Landfarm 345 CR 350". Two soil samples were collected by Key Energy Service designated personnel on 04/13/07, and received by the Envirotech laboratory on 04/13/07 for Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015, BTEX per USEPA Method 8021.

The samples were documented on Envirotech Chain of Custody No. 2484. The samples were assigned Laboratory Nos. 41031 (Cell #1) and 41032 (Cell #2) for tracking purposes.

The samples were analyzed 04/17/07 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters

Christine M. Walters
Laboratory Coordinator / Environmental Scientist

enc.

C:/files/labreports/key.wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-23-07
Lab ID#:	41030	Date Sampled:	04-13-07
Sample Matrix:	Water	Date Received:	04-13-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Chain of Custody:	2483

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 8.13**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Injection Pump**

Christine M Walker
Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-26-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-26-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0288	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0169	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Dectectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

Review

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-24-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-24-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	**0.080**	**0.020**	**200**
p,m-Cresol	**0.092**	**0.040**	**200**
2,4,6-Trichlorophenol	**ND**	**0.020**	**2.0**
2,4,5-Trichlorophenol	**ND**	**0.020**	**400**
Pentachlorophenol	**ND**	**0.020**	**100**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	**99%**
	2,4,6-Tribromophenol	**99%**

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

Review

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091
Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-28-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-28-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.012**	**5.0**
Hexachloroethane	**0.019**	**0.012**	**3.0**
Nitrobenzene	**ND**	**0.012**	**2.0**
Hexachlorobutadiene	**ND**	**0.012**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.012**	**0.13**
HexachloroBenzene	**ND**	**0.012**	**0.13**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	**97%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-23-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Analyzed:	04-23-07
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**0.038**	**0.001**	**5.0**
Barium	**1.26**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.001**	**0.001**	**5.0**
Lead	**0.001**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.065**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Pump**

Christine M Waetes
Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW.

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-26-TCV QA/QC	Date Reported:	04-26-07
Laboratory Number:	41002	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-26-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0195	0.0196	0.5%
Chloroform	0.0001	ND	ND	ND	ND	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0791	0.0801	1.2%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0195	0.1194	99.9%	47-132
Chloroform	0.1000	ND	0.0998	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0791	0.1789	99.9%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Dectectors, SW-846, USEPA, December 1996.

Comments: **QA/QC for samples 41002, 41030, 41092, 41159**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041
PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-24-TCA QA/QC	Date Reported:	04-24-07
Laboratory Number:	41092	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-24-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
p,m-Cresol	**ND**	**ND**	**0.040**	**ND**	**ND**	**0.0%**
2,4,6-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
2,4,5-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
Pentachlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: **QA/QC for samples 41092, 41002, 41030, 41159**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-28-TBN QA/QC	Date Reported:	04-28-07
Laboratory Number:	41092	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-28-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachloroethane	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Nitrobenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachlorobutadiene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
2,4-Dinitrotoluene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
HexachloroBenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: **QA/QC for samples 41002, 41030, 41092, 41159**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	04-23-TCM QA/QC	Date Reported:	04-23-07
Laboratory Number:	41002	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	04-23-07
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	**ND**	**ND**	**0.001**	**0.033**	**0.034**	**3.0%**	**0% - 30%**
Barium	**ND**	**ND**	**0.001**	**0.054**	**0.057**	**5.6%**	**0% - 30%**
Cadmium	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Chromium	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Lead	**ND**	**ND**	**0.001**	**0.002**	**0.002**	**0.0%**	**0% - 30%**
Mercury	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Selenium	**ND**	**ND**	**0.001**	**0.073**	**0.075**	**2.7%**	**0% - 30%**
Silver	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	**0.500**	**0.033**	**0.531**	**99.6%**	**80% - 120%**
Barium	**0.500**	**0.054**	**0.551**	**99.5%**	**80% - 120%**
Cadmium	**0.500**	**ND**	**0.499**	**99.8%**	**80% - 120%**
Chromium	**0.500**	**ND**	**0.498**	**99.6%**	**80% - 120%**
Lead	**0.500**	**0.002**	**0.501**	**99.8%**	**80% - 120%**
Mercury	**0.500**	**ND**	**0.501**	**100.2%**	**80% - 120%**
Selenium	**0.500**	**0.073**	**0.571**	**99.7%**	**80% - 120%**
Silver	**0.500**	**ND**	**0.498**	**99.6%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 41002, 41030, 41092, 41159**

Christine M Waites
Analyst

Review

CHAIN OF CUSTODY RECORD

2483

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
Key Energy	Injection Pump	
Sampler: Ray Rupp	Client No. 98065-007	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TCLP w/o Hg						Remarks
Injection Pump AF	4/13/07	13:00	41030	Water	4	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ray Rupp	4/13/07	14:40	[signature]	4/17/07	14:40
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

Ray Rupp

PO# 578 748

ENVIROTECH INC.

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Sample Receipt	Y	N	N/A
Received Intact	X		
Cool - Ice/Blue	X		

ENVIROTECH LABS

ACTICAL SOLUTIONS FOR A BETTER TOMORROW

July 10, 2007

Mr. Ray Rupp
Key Energy Service, Inc.
P.O. Box 900
Farmington, NM 87499

Phone: (505) 327-0416

Client No.: 98065-004

Dear Mr. Rupp,

Enclosed are the analytical results for the sample collected from the location designated as "Injection Well". One water sample was collected by Key Energy Service designated personnel on 07/03/07, and received by the Envirotech laboratory on 07/03/07 for TCLP W/O Herbicides and Pesticides.

The sample was documented on Envirotech Chain of Custody No. 2946. The sample was assigned Laboratory No. 42297 (Injection Pump AF) for tracking purposes.

The sample was analyzed 07/05/07 - 07/10/07 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters

Christine M. Walters
Laboratory Coordinator / Environmental Scientist

enc.

C:/files/labreports/key.wpd

CHAIN OF CUSTODY RECORD

2946

Client / Project Name	Project Location
Key Energy	Injection Pump
Sampler: Ray Rupp	Client No. 98065-007

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TCLP 2/H,P						Remarks
Injection Pump AF	7/3/07	1245	42297	Water	5	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ray Rupp	7-3-07	1305	Christin M Walden	7/3/07	1305
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)	34153	

PO: 931240

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0567	0.0001	200
Chloroform	0.0265	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0307	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	**1.38**	**0.020**	**200**
p,m-Cresol	**0.649**	**0.020**	**200**
2,4,6-Trichlorophenol	**ND**	**0.020**	**2.0**
2,4,5-Trichlorophenol	**ND**	**0.020**	**400**
Pentachlorophenol	**ND**	**0.020**	**100**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	**99%**
	2,4,6-Tribromophenol	**99%**

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	**1.38**	**0.020**	**200**
p,m-Cresol	**0.649**	**0.020**	**200**
2,4,6-Trichlorophenol	**ND**	**0.020**	**2.0**
2,4,5-Trichlorophenol	**ND**	**0.020**	**400**
Pentachlorophenol	**ND**	**0.020**	**100**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	**99%**
	2,4,6-Tribromophenol	**99%**

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.012**	**5.0**
Hexachloroethane	**ND**	**0.012**	**3.0**
Nitrobenzene	**0.220**	**0.012**	**2.0**
Hexachlorobutadiene	**ND**	**0.012**	**0.5**
2,4-Dinitrotoluene	**0.019**	**0.012**	**0.13**
HexachloroBenzene	**ND**	**0.012**	**0.13**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	**97%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.012**	**5.0**
Hexachloroethane	**ND**	**0.012**	**3.0**
Nitrobenzene	**0.220**	**0.012**	**2.0**
Hexachlorobutadiene	**ND**	**0.012**	**0.5**
2,4-Dinitrotoluene	**0.019**	**0.012**	**0.13**
HexachloroBenzene	**ND**	**0.012**	**0.13**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	**97%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Analyzed:	07-05-07
Preservative:	N/A	Date Extracted:	N/A
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**ND**	**0.001**	**5.0**
Barium	**4.41**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.003**	**0.001**	**5.0**
Lead	**0.004**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**ND**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Pump**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Lab ID#:	42297	Date Sampled:	07-03-07
Sample Matrix:	Water	Date Received:	7-03-07
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool and Intact	Chain of Custody:	2946

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 7.38**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Injection Pump**

Christine M Waeles
Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Lab ID#:	42297	Date Sampled:	07-03-07
Sample Matrix:	Water	Date Received:	7-03-07
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool and Intact	Chain of Custody:	2946

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 7.38**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Injection Pump**

Christine M Walters
Analyst

Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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CHAIN OF CUSTODY RECORD

2946

Client / Project Name	Project Location
Key Energy	Injection Pump
Sampler: Ray Rupp	Client No. 98065-007

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TCLP 2/H:P						Remarks
Injection Pump AF	7/3/07	1245	42297	Water	5	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ray Rupp	7-3-07	1305	Christina M Walden	7/3/07	1305
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)	34153	

PO:931240

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-09-TCV QA/QC	Date Reported:	07-09-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-09-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0567	0.0565	0.3%
Chloroform	0.0001	ND	ND	0.0265	0.0264	0.4%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0307	0.0305	0.4%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0567	0.1566	99.9%	47-132
Chloroform	0.1000	0.0265	0.1263	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0307	0.1305	99.8%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0998	99.8%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: **QA/QC for sample 42297**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-10-TCA QA/QC	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-10-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	**ND**	**ND**	**0.020**	**1.38**	**1.37**	**1.0%**
p,m-Cresol	**ND**	**ND**	**0.020**	**0.649**	**0.639**	**1.5%**
2,4,6-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
2,4,5-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
Pentachlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: **QA/QC for sample 42297**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-10-TBN QA/QC	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-10-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachloroethane	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Nitrobenzene	**ND**	**ND**	**0.012**	**0.220**	**0.216**	**1.9%**
Hexachlorobutadiene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
2,4-Dinitrotoluene	**ND**	**ND**	**0.012**	**0.019**	**0.019**	**0.0%**
HexachloroBenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: **QA/QC for sample 42297**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	07-05-TCM QA/QC	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	07-05-07
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Barium	**ND**	**ND**	**0.001**	**4.41**	**4.39**	**0.5%**	**0% - 30%**
Cadmium	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Chromium	**ND**	**ND**	**0.001**	**0.003**	**0.003**	**0.0%**	**0% - 30%**
Lead	**ND**	**ND**	**0.001**	**0.004**	**0.004**	**0.0%**	**0% - 30%**
Mercury	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Selenium	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Silver	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	**0.500**	**ND**	**0.499**	**99.8%**	**80% - 120%**
Barium	**0.500**	**4.41**	**4.90**	**99.8%**	**80% - 120%**
Cadmium	**0.500**	**ND**	**0.499**	**99.8%**	**80% - 120%**
Chromium	**0.500**	**0.003**	**0.503**	**100.0%**	**80% - 120%**
Lead	**0.500**	**0.004**	**0.503**	**99.8%**	**80% - 120%**
Mercury	**0.500**	**ND**	**0.498**	**99.6%**	**80% - 120%**
Selenium	**0.500**	**ND**	**0.499**	**99.8%**	**80% - 120%**
Silver	**0.500**	**ND**	**0.498**	**99.6%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 42297**

Analyst

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-09-TCV QA/QC	Date Reported:	07-09-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-09-07
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0567	0.0565	0.3%
Chloroform	0.0001	ND	ND	0.0265	0.0264	0.4%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0307	0.0305	0.4%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0567	0.1566	99.9%	47-132
Chloroform	0.1000	0.0265	0.1263	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0307	0.1305	99.8%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0998	99.8%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References:
Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: **QA/QC for sample 42297**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Analyzed:	07-05-07
Preservative:	N/A	Date Extracted:	N/A
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**ND**	**0.001**	**5.0**
Barium	**4.41**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.003**	**0.001**	**5.0**
Lead	**0.004**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**ND**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Pump**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

April 30, 2008

Mr. Ray Rupp
Key Energy Service, Inc.
P.O. Box 900
Farmington, NM 87499

Phone: (505) 327-0416

Client No.: 98065-004

Dear Mr. Rupp,

Enclosed are the analytical results for the sample collected from the location designated as "#345 CR 350". One water sample was collected by Key Energy Service designated personnel on 04/23/08, and received by the Envirotech laboratory on 04/23/08 for TCLP W/O Herbicides and Pesticides.

The sample was documented on Envirotech Chain of Custody No. 4256. The sample was assigned Laboratory No. 45140 (Injection Well) for tracking purposes.

The sample was analyzed 04/28/08 - 04/30/08 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters
Laboratory Manager

enc.

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CHAIN OF CUSTODY RECORD

4256

Client:	Project Name / Location:
Kay Energy	#345 CR 350
Client Address:	Sampler Name:
#345 CR-350	Ray Rupp
Client Phone No.:	Client No.:
505-486-3009	98065-0007

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP ~~with H/P~~	PAH	TPH (418.1)					Sample Cool	Sample Intact
Injection Well	4/23/08	1030	45140	Liquid	2-VOA 1-250 1-500 (2) liter									✓							✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ray Rupp	4/23/08	11 Am	Christin M Weeler	4/23/08	1100
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-30-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0158	0.0001	200
Chloroform	0.0024	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.1764	0.0001	0.5
1,2-Dichloroethane	0.0042	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100.0%
	1,4-difluorobenzene	100.0%
	4-bromochlorobenzene	100.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **#345 CR 350.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-30-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	0.109	0.020	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99.0%
	2,4,6-Tribromophenol	99.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **#345 CR 350.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-30-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.012**	**5.0**
Hexachloroethane	**ND**	**0.012**	**3.0**
Nitrobenzene	**ND**	**0.012**	**2.0**
Hexachlorobutadiene	**ND**	**0.012**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.012**	**0.13**
HexachloroBenzene	**ND**	**0.012**	**0.13**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	**98.0%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **#345 CR 350.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injextion Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Analyzed:	04-30-08
Preservative:	N/A	Date Digested:	04-28-08
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**ND**	**0.001**	**5.0**
Barium	**11.4**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.224**	**0.001**	**5.0**
Lead	**0.001**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.011**	**0.001**	**1.0**
Silver	**0.047**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **#345 CR 350.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Lab ID#:	45140	Date Sampled:	04-23-08
Sample Matrix:	Liquid	Date Received:	04-23-08
Preservative:	Cool	Date Analyzed:	04-28-08
Condition:	Intact	Chain of Custody:	4256

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 6.67**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **#345 CR 350.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-30-TCV QA/QC	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-30-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0158	0.0152	3.7%
Chloroform	0.0001	ND	ND	0.0024	0.0023	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.1764	0.1705	3.3%
1,2-Dichloroethane	0.0001	ND	ND	0.0042	0.0042	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0800	80.0%	26-163
1,1-Dichloroethene	0.1000	ND	0.1047	105%	43-143
2-Butanone (MEK)	0.1000	0.0158	0.0944	81.5%	47-132
Chloroform	0.1000	0.0024	0.0927	90.5%	49-133
Carbon Tetrachloride	0.1000	ND	0.0839	83.9%	43-143
Benzene	0.1000	0.1764	0.2798	101%	39-150
1,2-Dichloroethane	0.1000	0.0042	0.0987	94.7%	51-147
Trichloroethene	0.1000	ND	0.0996	99.6%	35-146
Tetrachloroethene	0.1000	ND	0.0828	82.8%	26-162
Chlorobenzene	0.1000	ND	0.0901	90.1%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.1005	100.5%	42-143

References:
Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: **QA/QC for Sample 45140**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-30-TBN QA/QC	Date Reported:	04-29-08
Laboratory Number:	45140	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-30-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachloroethane	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Nitrobenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachlorobutadiene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
2,4-Dinitrotoluene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
HexachloroBenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: **QA/QC for Sample 45140.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-30-TCA QA/QC	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-30-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
p,m-Cresol	**ND**	**ND**	**0.020**	**0.109**	**0.115**	**4.8%**
2,4,6-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
2,4,5-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
Pentachlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: **QA/QC for Sample 45140.**

Analyst

Christine M Walden
Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	04-21-TCM QA/QC	Date Reported:	04-29-08
Laboratory Number:	45037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	04-21-08
Condition:	N/A	Date Extracted:	04-18-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Barium	**ND**	**ND**	**0.001**	**11.4**	**11.4**	**0.0%**	**0% - 30%**
Cadmium	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Chromium	**ND**	**ND**	**0.001**	**0.224**	**0.221**	**1.4%**	**0% - 30%**
Lead	**ND**	**ND**	**0.001**	**0.001**	**0.001**	**0.0%**	**0% - 30%**
Mercury	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Selenium	**ND**	**ND**	**0.001**	**0.011**	**0.013**	**15.0%**	**0% - 30%**
Silver	**ND**	**ND**	**0.001**	**0.047**	**0.046**	**0.4%**	**0% - 30%**

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	**0.250**	**ND**	**0.227**	**90.6%**	**80% - 120%**
Barium	**0.500**	**11.35**	**11.9**	**100%**	**80% - 120%**
Cadmium	**0.250**	**ND**	**0.214**	**85.6%**	**80% - 120%**
Chromium	**0.500**	**0.224**	**0.738**	**102%**	**80% - 120%**
Lead	**0.500**	**0.001**	**0.501**	**100%**	**80% - 120%**
Mercury	**0.100**	**ND**	**0.096**	**96.0%**	**80% - 120%**
Selenium	**0.100**	**0.011**	**0.102**	**91.2%**	**80% - 120%**
Silver	**0.100**	**0.047**	**0.164**	**112%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 45140.**

Analyst

Review

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	W. Leak Detector	Date Reported:	06-09-08
Laboratory Number:	45735	Date Sampled:	06-03-08
Chain of Custody No:	4524	Date Received:	06-03-08
Sample Matrix:	Water	Date Extracted:	06-05-08
Preservative:	Cool	Date Analyzed:	06-06-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.1**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **West Leak Detector**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	W. Leak Detector	Date Reported:	06-09-08
Laboratory Number:	45735	Date Sampled:	06-03-08
Chain of Custody:	4524	Date Received:	06-03-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-04-08
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	**7.12**	s.u.		
Conductivity @ 25° C	**28,600**	umhos/cm		
Total Dissolved Solids @ 180C	**18,000**	mg/L		
Total Dissolved Solids (Calc)	**18,216**	mg/L		
SAR	**94.6**	ratio		
Total Alkalinity as CaCO3	**1,520**	mg/L		
Total Hardness as CaCO3	**798**	mg/L		
Bicarbonate as HCO3	**1,520**	mg/L	24.91	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**5.5**	mg/L	0.09	meq/L
Nitrite Nitrogen	**0.050**	mg/L	0.00	meq/L
Chloride	**8,800**	mg/L	248.25	meq/L
Fluoride	**0.36**	mg/L	0.02	meq/L
Phosphate	**57.0**	mg/L	1.80	meq/L
Sulfate	**1,270**	mg/L	26.44	meq/L
Iron	**0.059**	mg/L	0.00	meq/L
Calcium	**255**	mg/L	12.72	meq/L
Magnesium	**39.3**	mg/L	3.23	meq/L
Potassium	**726**	mg/L	18.57	meq/L
Sodium	**6,140**	mg/L	267.09	meq/L
Cations			301.62	meq/L
Anions			301.51	meq/L
Cation/Anion Difference			**0.04%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **West Leak Detector.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	W. Leak Detector	Date Reported:	06-09-08
Chain of Custody:	4524	Date Sampled:	06-03-08
Laboratory Number:	45735	Date Received:	06-03-08
Sample Matrix:	Water	Date Analyzed:	06-06-08
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**4.7**	**1**	**0.2**
Toluene	**23.5**	**1**	**0.2**
Ethylbenzene	**2.2**	**1**	**0.2**
p,m-Xylene	**26.6**	**1**	**0.2**
o-Xylene	**7.9**	**1**	**0.1**
Total BTEX	**64.9**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**99 %**
	1,4-difluorobenzene	**99 %**
	4-bromochlorobenzene	**99 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **West Leak Detector.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	06-06-BT QA/QC	Date Reported:	06-09-08
Laboratory Number:	45735	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-06-08
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff. Accept. Range 0 - 15%	Blank Conc.	Detect. Limit
Benzene	2.8640E+007	2.8726E+007	0.30%	ND	0.2
Toluene	2.3081E+007	2.3151E+007	0.30%	ND	0.2
Ethylbenzene	1.6852E+007	1.6903E+007	0.30%	ND	0.2
p,m-Xylene	3.6405E+007	3.6514E+007	0.30%	ND	0.2
o-Xylene	1.5619E+007	1.5666E+007	0.30%	ND	0.1

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	4.7	4.2	9.1%	0 - 30%
Toluene	23.5	23.4	0.5%	0 - 30%
Ethylbenzene	2.2	2.1	5.0%	0 - 30%
p,m-Xylene	26.6	26.0	2.4%	0 - 30%
o-Xylene	7.9	7.6	4.3%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	4.7	50.0	49.6	90.7%	39 - 150
Toluene	23.5	50.0	73.4	99.9%	46 - 148
Ethylbenzene	2.2	50.0	49.1	94.1%	32 - 160
p,m-Xylene	26.6	100	116	91.9%	46 - 148
o-Xylene	7.9	50.0	55.8	96.4%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 45735 and 45755.**

Analyst

Review

CHAIN OF CUSTODY RECORD

4524

Client:	Project Name / Location:
KEY ENERGY	WEST LEAK DETECTOR
Client Address:	Sampler Name: STEVE WILSON
Client Phone No.:	Client No.: 98065-0007

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)				Sample Cool	Sample Intact
W. LEAK DETECTOR	6/3/08	1340	45735		1-500ml			✓	✓			✓								✓	✓
		1340			2-VOA			✓													
		1340			2-VOA				✓												

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Steve Wilson			Kendall Augustin	6/3/08	1414
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

Po# 1151403

ENVIROTECH INC.

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-06-TPH QA/QC	Date Reported:	06-09-08
Laboratory Number:	45735	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-06-08
Condition:	N/A	Analysis Requested:	TPH

Calibration Check	Lot Std	Cal Ver	% Difference	Accept Range
Gasoline Range C5 - C10	1.0035E+000	1.0015E+000	**0.20%**	**0 - 15%**
Diesel Range C10 - C28	1.0056E+000	1.0036E+000	**0.20%**	**0 - 15%**

Blank Conc. (mg/L)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	**ND**	**25.0**	**25.4**	**102%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**25.0**	**24.9**	**99.6%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 45735 and 45755.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

June 9, 2008

Mr. Steve Wilson
Key Energy Service, Inc.
P.O. Box 900
Farmington, NM 87499

Phone: (505) 486-2009

Client No.: 98065-0007

Dear Mr. Wilson,

Enclosed are the analytical results for the sample collected from the location designated as "West Leak Detector". One water sample was collected by Key Energy Service designated personnel on 06/03/08, and received by the Envirotech laboratory on 06/03/08 for Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015, BTEX per USEPA Method 8021 and Cation / Anion.

The sample was documented on Envirotech Chain of Custody No. 4524. The sample was assigned Laboratory Nos. 45735 (W. Leak Detector) for tracking purposes.

The samples were analyzed 04/25/07 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters
Laboratory Manager

enc.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Main Pond	Date Reported:	06-24-08
Laboratory Number:	45935	Date Sampled:	06-17-08
Chain of Custody No:	4604	Date Received:	06-17-08
Sample Matrix:	Water	Date Extracted:	06-19-08
Preservative:	Cool	Date Analyzed:	06-19-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	**8.0**	**0.2**
Diesel Range (C10 - C28)	**1.8**	**0.1**
Total Petroleum Hydrocarbons	**9.8**	**0.1**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Main Pond.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Main Pond	Date Reported:	06-25-08
Laboratory Number:	45935	Date Sampled:	06-17-08
Chain of Custody:	4604	Date Received:	06-17-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-18-08
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	**7.48**	s.u.		
Conductivity @ 25° C	**32,500**	umhos/cm		
Total Dissolved Solids @ 180C	**19,700**	mg/L		
Total Dissolved Solids (Calc)	**18,648**	mg/L		
SAR	**67.9**	ratio		
Total Alkalinity as CaCO3	**1,500**	mg/L		
Total Hardness as CaCO3	**1,300**	mg/L		
Bicarbonate as HCO3	**1,500**	mg/L	24.59	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**1.0**	mg/L	0.02	meq/L
Nitrite Nitrogen	**<0.01**	mg/L	0.00	meq/L
Chloride	**10,000**	mg/L	282.10	meq/L
Fluoride	**1.73**	mg/L	0.09	meq/L
Phosphate	**16.5**	mg/L	0.52	meq/L
Sulfate	**85.5**	mg/L	1.78	meq/L
Iron	**3.72**	mg/L	0.13	meq/L
Calcium	**448**	mg/L	22.36	meq/L
Magnesium	**43.3**	mg/L	3.56	meq/L
Potassium	**1,520**	mg/L	38.88	meq/L
Sodium	**5,620**	mg/L	244.47	meq/L
Cations			309.27	meq/L
Anions			309.09	meq/L
Cation/Anion Difference			**0.06%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Main Pond.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Main Pond	Date Reported:	06-24-08
Chain of Custody:	4604	Date Sampled:	06-17-08
Laboratory Number:	45935	Date Received:	06-17-08
Sample Matrix:	Water	Date Analyzed:	06-19-08
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**20.1**	**1**	**0.2**
Toluene	**148**	**1**	**0.2**
Ethylbenzene	**242**	**1**	**0.2**
p,m-Xylene	**680**	**1**	**0.2**
o-Xylene	**406**	**1**	**0.1**
Total BTEX	**1,500**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	4-bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, *Aromatic and Halogenated* Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Main Pond.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-19-TPH QA/QC	Date Reported:	06-24-08
Laboratory Number:	45935	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-19-08
Condition:	N/A	Analysis Requested:	TPH

	Initial Res.	Cont. Cal. RF	% Difference	Accept. Range
Gasoline Range C5 - C10	9.8264E-001	9.8068E-001	**0.20%**	**0 - 15%**
Diesel Range C10 - C28	9.9679E-001	9.9480E-001	**0.20%**	**0 - 15%**

Blank Conc. (mg/L)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**8.0**	**7.7**	**3.8%**	**0 - 30%**
Diesel Range C10 - C28	**1.8**	**1.6**	**11.1%**	**0 - 30%**

Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**8.0**	**250**	**276**	**107%**	**75 - 125%**
Diesel Range C10 - C28	**1.8**	**250**	**256**	**102%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 45935 and 45949.**

Analyst

Christine M Walters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	06-19-BT QA/QC	Date Reported:	06-24-08
Laboratory Number:	45935	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-19-08
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.2023E+007	2.2089E+007	0.30%	ND	0.2
Toluene	1.8623E+007	1.8679E+007	0.30%	ND	0.2
Ethylbenzene	1.3629E+007	1.3670E+007	0.30%	ND	0.2
p,m-Xylene	3.0712E+007	3.0805E+007	0.30%	ND	0.2
o-Xylene	1.2985E+007	1.3024E+007	0.30%	ND	0.1

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	20.1	20.0	0.5%	0 - 30%
Toluene	148	147	0.7%	0 - 30%
Ethylbenzene	242	241	0.4%	0 - 30%
p,m-Xylene	680	677	0.4%	0 - 30%
o-Xylene	406	404	0.5%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	20.1	50.0	66.0	94.1%	39 - 150
Toluene	148	50.0	202	102%	46 - 148
Ethylbenzene	242	50.0	289	98.9%	32 - 160
p,m-Xylene	680	100	780	100%	46 - 148
o-Xylene	406	50.0	456	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 45935 and 45949.**

Analyst

Review

CHAIN OF CUSTODY RECORD

4604

Client:	Project Name / Location:
Key Energy	Main Pond
Client Address:	Sampler Name: STEVE WILSON
Client Phone No.:	Client No.: 98065-0007

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)					Sample Cool	Sample Intact
Main Pond	4/17/08	0650	45935	H_2O	1-~~500 ml~~ 4-VOA			✓	✓			✓									✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
X Steve Wilson	4/17/08	1419	Kendall Augustin	4/17/08	1419
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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PO # ~~1160~~ 1160122

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	08-06-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0431	0.0001	200
Chloroform	0.0282	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0218	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.1%
	1,4-difluorobenzene	93.2%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Well.**

Analyst

Christine M Waeters
Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	08-05-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.583	0.020	200
p,m-Cresol	0.319	0.020	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	95.7%
	2,4,6-Tribromophenol	95.3%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Well**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	08-05-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.012**	**5.0**
Hexachloroethane	**ND**	**0.012**	**3.0**
Nitrobenzene	**ND**	**0.012**	**2.0**
Hexachlorobutadiene	**ND**	**0.012**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.012**	**0.13**
HexachloroBenzene	**ND**	**0.012**	**0.13**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	**94.9%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Well.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-01-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Analyzed:	08-01-08
Preservative:	Cool	Date Digested:	07-30-08
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**0.129**	**0.001**	**5.0**
Barium	**14.8**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.223**	**0.001**	**5.0**
Lead	**0.007**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.049**	**0.001**	**1.0**
Silver	**0.004**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Well.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-01-08
Lab ID#:	46525	Date Sampled:	07-29-08
Sample Matrix:	Water	Date Received:	07-29-08
Preservative:	Cool	Date Analyzed:	07-30-08
Condition:	Intact	Chain of Custody:	4894

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 5.44**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Injection Well.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-06-TCV QA/QC	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-06-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0431	0.0451	4.7%
Chloroform	0.0001	ND	ND	0.0282	0.0274	3.1%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0218	0.0237	8.8%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0946	94.6%	26-163
1,1-Dichloroethene	0.1000	ND	0.1046	105%	43-143
2-Butanone (MEK)	0.1000	0.0431	0.1031	72.1%	47-132
Chloroform	0.1000	0.0282	0.1139	88.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0935	93.5%	43-143
Benzene	0.1000	0.0218	0.1092	89.7%	39-150
1,2-Dichloroethane	0.1000	ND	0.1065	107%	51-147
Trichloroethene	0.1000	ND	0.0936	93.6%	35-146
Tetrachloroethene	0.1000	ND	0.0875	87.5%	26-162
Chlorobenzene	0.1000	ND	0.0894	89.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0795	79.5%	42-143

References:
Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: **QA/QC for Sample 46525.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270
TCLP PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-05-TCA QA/QC	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-05-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	**ND**	**ND**	**0.020**	**0.583**	**0.592**	**1.6%**
p,m-Cresol	**ND**	**ND**	**0.020**	**0.319**	**0.330**	**3.5%**
2,4,6-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
2,4,5-Trichlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**
Pentachlorophenol	**ND**	**ND**	**0.020**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: **QA/QC for Sample 46525.**

Analyst

Christine M Walter
Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-05-TBN QA/QC	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-05-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachloroethane	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Nitrobenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
Hexachlorobutadiene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
2,4-Dinitrotoluene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**
HexachloroBenzene	**ND**	**ND**	**0.012**	**ND**	**ND**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: **QA/QC for Sample 46525.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	08-01-TCM QA/QC	Date Reported:	08-01-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	08-01-08
Condition:	N/A	Date Digested:	07-30-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	**ND**	**ND**	**0.001**	**0.129**	**0.136**	**5.6%**	**0% - 30%**
Barium	**ND**	**ND**	**0.001**	**14.8**	**14.9**	**0.5%**	**0% - 30%**
Cadmium	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Chromium	**ND**	**ND**	**0.001**	**0.223**	**0.235**	**5.1%**	**0% - 30%**
Lead	**ND**	**ND**	**0.001**	**0.007**	**0.009**	**19.2%**	**0% - 30%**
Mercury	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Selenium	**ND**	**ND**	**0.001**	**0.049**	**0.047**	**4.9%**	**0% - 30%**
Silver	**ND**	**ND**	**0.001**	**0.004**	**0.005**	**9.8%**	**0% - 30%**

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	**0.250**	**0.129**	**0.340**	**89.8%**	**80% - 120%**
Barium	**0.500**	**14.8**	**14.69**	**96.1%**	**80% - 120%**
Cadmium	**0.250**	**ND**	**0.200**	**80.0%**	**80% - 120%**
Chromium	**0.500**	**0.223**	**0.586**	**81.1%**	**80% - 120%**
Lead	**0.500**	**0.007**	**0.551**	**109%**	**80% - 120%**
Mercury	**0.100**	**ND**	**0.091**	**91.0%**	**80% - 120%**
Selenium	**0.100**	**0.049**	**0.134**	**89.8%**	**80% - 120%**
Silver	**0.100**	**0.004**	**0.092**	**88.1%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 46525.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

4894

Client: Key Energy	Project Name / Location: Injection Well
Client Address: Will Pick-up results	Sampler Name: Steve Wilson
Client Phone No.:	Client No.: 98065-0007

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP ~~with H/P~~	PAH	TPH (418.1)				Sample Cool	Sample Intact
Pump After Filter	7/29/08	1400	46525	Water	2-500ml 2-VOA 1-250ml									✓						✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Steve Wilson	07-29-08	2:35 PM	Must M Walk	7/29/08	1435
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

PO # 1189731

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Analytical Laboratory

EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Chain of Custody:	9069	Date Sampled:	04-12-10
Laboratory Number:	53668	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-12-10
Preservative:		Analysis Requested:	8260 VOC
Condition:	Cool and Intact		

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	667 0.67 ppm	(ug/L)	1.0	10
Toluene	5,140	(ug/L)	1.0	100
Ethylbenzene	887	(ug/L)	1.0	10
Xylenes, Total	3,520	(ug/L)	1.0	100
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	760	(ug/L)	1.0	10
1,3,5-Trimethylbenzene	1,060	(ug/L)	1.0	10
1,2-Dichloroethane (EDC)	18.8	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	178	(ug/L)	1.0	1
1-Methylnaphthalene	83.0	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	88.4	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

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EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client: Key Energy
Sample ID: SWD
Laboratory Number: 53668

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	745	(ug/L)	1.0	10
4-Isopropyltoluene	97.3	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	3.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	183	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	2,206	(ug/L)	1.0	10
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	105	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	97.2	% Recovery	74.6-123	1
Toluene-d8	106	% Recovery	84.2-115	1
4-Bromofluorobenzene	103	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **Sunco SWD #1**

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TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Preservative:	Cool	Date Digested:	04-13-10
Condition:	Intact	Analysis Needed:	RCRA Metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Barium	**8.23**	**0.001**
Cadmium	**ND**	**0.001**
Chromium	**0.146**	**0.001**
Lead	**0.006**	**0.001**
Selenium	**0.003**	**0.001**
Silver	**0.026**	**0.001**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Sunco SWD #1**

Analyst

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QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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EPA Method 8260B
Volatile Organic Compounds by GC/MS
Daily Calibration Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Daily Calibration	Date Reported:	04-13-10
Laboratory Number:	0412V	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-12-10
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
Benzene	100	96.0	96.0	80 - 120
Toluene	100	98.1	98.1	80 - 120
Ethylbenzene	100	90.3	90.3	80 - 120
Xylenes, Total	100	104	104	80 - 120
Methyl tert-butyl ether (MTBE)	100	84.3	84.3	80 - 120
1,2,4-Trimethylbenzene	100	85.1	85.1	80 - 120
1,3,5-Trimethylbenzene	100	88.6	88.6	80 - 120
1,2-Dichloroethane (EDC)	100	88.6	88.6	80 - 120
1,2-Dibromoethane (EDB)	100	96.5	96.5	80 - 120
Naphthalene	100	89.1	89.1	80 - 120
1-Methylnaphthalene	100	94.7	94.7	80 - 120
2-Methylnaphthalene	100	105	105	80 - 120
Bromobenzene	100	86.1	86.1	80 - 120
Bromochloromethane	100	87.6	87.6	80 - 120
Bromodichloromethane	100	84.1	84.1	80 - 120
Bromoform	100	85.5	85.5	80 - 120
Bromomethane	100	94.7	94.7	80 - 120
Carbon Tetrachloride	100	85.5	85.5	80 - 120
Chlorobenzene	100	93.2	93.2	80 - 120
Chloroethane	100	90.3	90.3	80 - 120
Chloroform	100	84.7	84.7	80 - 120
Chloromethane	100	100	100	80 - 120
2-Chlorotoluene	100	85.5	85.5	80 - 120
4-Chlorotoluene	100	86.2	86.2	80 - 120
cis-1,2-Dichloroethene	100	96.8	96.8	80 - 120
cis-1,3-Dichloropropene	100	90.6	90.6	80 - 120
1,2-Dibromo-3-chloropropane	100	96.9	96.9	80 - 120
Dibromochloromethane	100	87.8	87.8	80 - 120
Dibromoethane	100	94.3	94.3	80 - 120
1,2-Dichlorobenzene	100	95.6	95.6	80 - 120
1,3-Dichlorobenzene	100	96.4	96.4	80 - 120
1,4-Dichlorobenzene	100	97.7	97.7	80 - 120
Dichlorodifluoromethane	100	87.5	87.5	80 - 120
1,1-Dichloroethane	100	88.4	88.4	80 - 120
1,1-Dichloroethene	100	93.9	93.9	80 - 120
1,2-Dichloropropane	100	95.7	95.7	80 - 120
1,3-Dichloropropane	100	85.0	85.0	80 - 120
2,2-Dichloropropane	100	83.5	83.5	80 - 120

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EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Daily Calibration
Laboratory Number: 0412V

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
1,1-Dichloropropene	100	84.0	84.0	80 - 120
Hexachlorobutadiene	100	89.1	89.1	80 - 120
Isopropylbenzene	100	94.7	94.7	80 - 120
4-Isopropyltoluene	100	105.5	105.5	80 - 120
Methylene Chloride	100	101.2	101.2	80 - 120
n-Butylbenzene	100	91.6	91.6	80 - 120
n-Propylbenzene	100	92.0	92.0	80 - 120
sec-Butylbenzene	100	88.6	88.6	80 - 120
Styrene	100	86.9	86.9	80 - 120
tert-Butylbenzene	100	89.8	89.8	80 - 120
Tetrachloroethene (PCE)	100	97.7	97.7	80 - 120
1,1,1,2-Tetrachloroethane	100	84.7	84.7	80 - 120
1,1,2,2-Tetrachloroethane	100	91.0	91.0	80 - 120
trans-1,2-Dichloroethene	100	91.3	91.3	80 - 120
trans-1,3-Dichloropropene	100	82.4	82.4	80 - 120
Trichloroethene (TCE)	100	85.3	85.3	80 - 120
Trichlorofluoromethane	100	84.6	84.6	80 - 120
1,2,3-Trichlorobenzene	100	95.2	95.2	80 - 120
1,2,4-Trichlorobenzene	100	94.7	94.7	80 - 120
1,1,1-Trichloroethane	100	85.0	85.0	80 - 120
1,1,2-Trichloroethane	100	83.7	83.7	80 - 120
1,2,3-Trichloropropane	100	85.9	85.9	80 - 120
Vinyl Chloride	100	86.3	86.3	80 - 120

Surrogates:			Rec. Limits
Dibromofluoromethane	101	% Recovery	78.6-115
1,2-Dichloroethane-d4	106	% Recovery	74.6-123
Toluene-d8	89.3	% Recovery	84.2-115
4-Bromofluorobenzene	93.0	% Recovery	78.6-115

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 53637 and 53668.**

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EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Blank	Date Reported:	04-13-10
Laboratory Number:	0412VBLK	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-12-10
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

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EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Blank
Laboratory Number: 0412VBLK

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	1.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	78.9	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	89.4	% Recovery	74.6-123	1
Toluene-d8	94.6	% Recovery	84.2-115	1
4-Bromofluorobenzene	95.9	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 53637 and 53668.**

Analyst

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EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spikes	Date Reported:	04-13-10
Laboratory Number:	04-12 VOA - 53637	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-12-10
Condition:	N/A	Analysis Requested:	8260 VOC

Spike Analyte	Sample	Units: ug/L Added	Result	%Recovery	Recovery Limits	Det. Limit
Benzene	330	100.0	385	89.6%	85.3 - 120	1.0
Toluene	1,800	100.0	2,090	110%	73 - 123	1.0
Chlorobenzene	ND	100.0	103	103%	84.7 - 119	1.0
1,1-Dichloroethene	ND	100.0	100	100%	83.4 - 122	1.0
Trichloroethene (TCE)	ND	100.0	98	98.4%	76.1 - 126	1.0

Spike Duplicate Analyte	Sample	Units: ug/L Added	Result	%Recovery	Recovery Limits	Det. Limit
Benzene	330	100.0	358	83.3%	85.3 - 120	1.0
Toluene	1,800	100.0	1,950	103%	73 - 123	1.0
Chlorobenzene	ND	100.0	96	95.8%	84.7 - 119	1.0
1,1-Dichloroethene	ND	100.0	96	95.9%	83.4 - 122	1.0
Trichloroethene (TCE)	ND	100.0	88	88.1%	76.1 - 126	1.0

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 53637 and 53668.**

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CATION / ANION ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-14-10
Laboratory Number:	53668	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Preservative:	Cool		
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	8.38	s.u.		
Conductivity @ 25° C	17,600	umhos/cm		
Total Dissolved Solids @ 180C	10,800	mg/L		
Total Dissolved Solids (Calc)	10,830	mg/L		
SAR	50.6	ratio		
Total Alkalinity as CaCO3	1,340	mg/L		
Total Hardness as CaCO3	969	mg/L		
Bicarbonate as CaCO3	1,340	mg/L	21.96	meq/L
Carbonate as CaCO3	<0.1	mg/L	0.00	meq/L
Hydroxide as CaCO3	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.900	mg/L	0.01	meq/L
Nitrite Nitrogen	0.037	mg/L	0.00	meq/L
Chloride	4,850	mg/L	136.82	meq/L
Fluoride	2.06	mg/L	0.11	meq/L
Phosphate	2.94	mg/L	0.09	meq/L
Sulfate	1,020	mg/L	21.24	meq/L
Iron	1.65	mg/L	0.06	meq/L
Calcium	362	mg/L	18.06	meq/L
Magnesium	15.5	mg/L	1.28	meq/L
Potassium	142	mg/L	3.63	meq/L
Sodium	3,620	mg/L	157.47	meq/L
Cations			180.44	meq/L
Anions			180.23	meq/L
Cation/Anion Difference			0.12%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Sunco SWD #1**

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SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-14-10
Lab ID#:	53668	Date Sampled:	04-12-10
Sample Matrix:	Aqueous	Date Received:	04-12-10
Preservative:	Cool	Date Analyzed:	04-14-10
Condition:	Intact	Chain of Custody:	9069

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 8.33**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Sunco SWD #1**

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TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Preservative:	Cool	Date Digested:	04-13-10
Condition:	Intact	Analysis Needed:	RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Barium	**8.23**	**0.001**
Cadmium	**ND**	**0.001**
Chromium	**0.146**	**0.001**
Lead	**0.006**	**0.001**
Selenium	**0.003**	**0.001**
Silver	**0.026**	**0.001**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Sunco SWD #1**

Analyst

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TRACE METAL ANALYSIS
Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	QA/QC
Sample ID:	04-12 TM QA/AC	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Analysis Requested:	RCRA Metals	Date Analyzed:	04-13-10
Condition:	N/A	Date Digested:	04-13-10

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/Kg)	Method Blank	Detection Limit	Sample	Duplicate	% Diff	Acceptance Range
Barium	ND	ND	0.001	8.23	8.66	5.2%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.146	0.149	2.0%	0% - 30%
Lead	ND	ND	0.001	0.006	0.005	16.4%	0% - 30%
Selenium	ND	ND	0.001	0.003	0.002	28.6%	0% - 30%
Silver	ND	ND	0.001	0.026	0.029	10.9%	0% - 30%

Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Barium	0.500	8.23	8.97	103%	80% - 120%
Cadmium	0.250	ND	0.242	96.7%	80% - 120%
Chromium	0.500	0.146	0.680	105%	80% - 120%
Lead	0.500	0.006	0.471	93.1%	80% - 120%
Selenium	0.100	0.003	0.084	81.7%	80% - 120%
Silver	0.100	0.026	0.141	112%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 53668.**

Analyst

Christine M Walters
Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

TOTAL MERCURY ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Condition:	Cool & Intact	Date Digested:	04-13-10
		Analysis Needed:	Total Mercury

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Mercury	**0.09**	**0.02**

ND - Parameter not detected at the stated detection limit.

References: Method 7470A, Mercury in Liquid Waste (Manual Cold-Vapor Technique). SW-846, USEPA, December 1996.

Comments: **Sunco SWD #1**

Analyst

Review

envirotech
Analytical Laboratory

Total Mercury Analysis
Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-13-Hg QA/QC	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Analysis Requested:	Total Mercury	Date Analyzed:	04-13-10
Condition:	N/A	Date Digested:	04-13-10

Blank & Duplicate Conc. (ug/L)	Instrument Blank (ug/L)	Method Blank (ug/L)	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Mercury	**ND**	**ND**	**0.02**	**0.09**	**0.08**	**11.1%**	**0% - 30%**

Spike Conc. (ug/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Mercury	**10.0**	**0.09**	**8.26**	**81.8%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 7470A, Mercury in Liquid Waste (Manual Cold-Vapor Technique).
SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 53668.**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

Client: Key Energy	Project Name / Location: Sarco SWD #1
Client Address:	Sampler Name: Neil Allen
Client Phone No.: 486-2010	Client No.: 98065-0013

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative			ANALYSIS / PARAMETERS														
						$HgCl_2$	HCl		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA ~~8~~ 6 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	8270	Hg	As	Sample Cool	Sample Intact
SWD	4/12/10	14:30	53668	Soil Sludge Solid [✓ Aqueous]	7 2L ambers 1 500L 2 Vials 1 125 1 250						X	X	X	X					X	X	X	Y	Y
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Neil Allen	4/12/10	2:55		4/12/10	14:55
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

envirotech
Analytical Laboratory

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-10*

CLIENT: Envirotech
Lab Order: 1004248
Project: Key Energy
Lab ID: 1004248-01

Client Sample ID: 53668-SWD
Collection Date: 4/12/2010 2:30:00 PM
Date Received: 4/13/2010
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Acenaphthylene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Aniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Anthracene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Azobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benz(a)anthracene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(a)pyrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(b)fluoranthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(g,h,i)perylene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(k)fluoranthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzoic acid	ND	100		µg/L	1	4/14/2010 5:53:58 PM
Benzyl alcohol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-chloroethyl)ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-ethylhexyl)phthalate	1300	250		µg/L	5	4/15/2010 3:40:10 PM
4-Bromophenyl phenyl ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Butyl benzyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Carbazole	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Chloro-3-methylphenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Chloroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Chloronaphthalene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Chlorophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Chlorophenyl phenyl ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Chrysene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Di-n-butyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Di-n-octyl phthalate	1500	250		µg/L	5	4/15/2010 3:40:10 PM
Dibenz(a,h)anthracene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Dibenzofuran	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,2-Dichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,3-Dichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,4-Dichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
3,3'-Dichlorobenzidine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Diethyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Dimethyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dichlorophenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dimethylphenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dinitrophenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dinitrotoluene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,6-Dinitrotoluene	ND	50		µg/L	1	4/14/2010 5:53:58 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-10*

CLIENT:	Envirotech	**Client Sample ID:**	53668-SWD
Lab Order:	1004248	**Collection Date:**	4/12/2010 2:30:00 PM
Project:	Key Energy	**Date Received:**	4/13/2010
Lab ID:	1004248-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Fluoranthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Fluorene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachlorobutadiene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachlorocyclopentadiene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachloroethane	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Isophorone	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Methylnaphthalene	290	50		µg/L	1	4/14/2010 5:53:58 PM
2-Methylphenol	94	50		µg/L	1	4/14/2010 5:53:58 PM
3+4-Methylphenol	69	50		µg/L	1	4/14/2010 5:53:58 PM
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
N-Nitrosodimethylamine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
N-Nitrosodiphenylamine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Naphthalene	220	50		µg/L	1	4/14/2010 5:53:58 PM
2-Nitroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
3-Nitroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Nitroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Nitrobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Nitrophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Nitrophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Pentachlorophenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
Phenanthrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Phenol	95	50		µg/L	1	4/14/2010 5:53:58 PM
Pyrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Pyridine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,2,4-Trichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,4,5-Trichlorophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,4,6-Trichlorophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Surr: 2,4,6-Tribromophenol	74.2	16.6-150		%REC	1	4/14/2010 5:53:58 PM
Surr: 2-Fluorobiphenyl	71.6	19.6-134		%REC	1	4/14/2010 5:53:58 PM
Surr: 2-Fluorophenol	34.1	9.54-113		%REC	1	4/14/2010 5:53:58 PM
Surr: 4-Terphenyl-d14	88.6	22.7-145		%REC	1	4/14/2010 5:53:58 PM
Surr: Nitrobenzene-d5	66.6	14.6-134		%REC	1	4/14/2010 5:53:58 PM
Surr: Phenol-d5	41.5	10.7-80.3		%REC	1	4/14/2010 5:53:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004248

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: mb-21933		*MBLK*				Batch ID:	**21933**	Analysis Date:		4/15/2010 3:09:36 PM	
Acenaphthene	ND	µg/L	10								
Acenaphthylene	ND	µg/L	10								
Aniline	ND	µg/L	10								
Anthracene	ND	µg/L	10								
Azobenzene	ND	µg/L	10								
Benz(a)anthracene	ND	µg/L	10								
Benzo(a)pyrene	ND	µg/L	10								
Benzo(b)fluoranthene	ND	µg/L	10								
Benzo(g,h,i)perylene	ND	µg/L	10								
Benzo(k)fluoranthene	ND	µg/L	10								
Benzoic acid	ND	µg/L	20								
Benzyl alcohol	ND	µg/L	10								
Bis(2-chloroethoxy)methane	ND	µg/L	10								
Bis(2-chloroethyl)ether	ND	µg/L	10								
Bis(2-chloroisopropyl)ether	ND	µg/L	10								
Bis(2-ethylhexyl)phthalate	ND	µg/L	10								
[illegible]omophenyl phenyl ether	ND	µg/L	10								
[illegible] benzyl phthalate	ND	µg/L	10								
Carbazole	ND	µg/L	10								
4-Chloro-3-methylphenol	ND	µg/L	10								
4-Chloroaniline	ND	µg/L	10								
2-Chloronaphthalene	ND	µg/L	10								
2-Chlorophenol	ND	µg/L	10								
4-Chlorophenyl phenyl ether	ND	µg/L	10								
Chrysene	ND	µg/L	10								
Di-n-butyl phthalate	ND	µg/L	10								
Di-n-octyl phthalate	ND	µg/L	10								
Dibenz(a,h)anthracene	ND	µg/L	10								
Dibenzofuran	ND	µg/L	10								
1,2-Dichlorobenzene	ND	µg/L	10								
1,3-Dichlorobenzene	ND	µg/L	10								
1,4-Dichlorobenzene	ND	µg/L	10								
3,3'-Dichlorobenzidine	ND	µg/L	10								
Diethyl phthalate	ND	µg/L	10								
Dimethyl phthalate	ND	µg/L	10								
2,4-Dichlorophenol	ND	µg/L	20								
2,4-Dimethylphenol	ND	µg/L	10								
4,6-Dinitro-2-methylphenol	ND	µg/L	20								
2,4-Dinitrophenol	ND	µg/L	20								
2,4-Dinitrotoluene	ND	µg/L	10								
2,6-Dinitrotoluene	ND	µg/L	10								
Fluoranthene	ND	µg/L	10								
Fluorene	ND	µg/L	10								
[illegible]xachlorobenzene	ND	µg/L	10								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004248

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: mb-21933		*MBLK*				Batch ID:	**21933**	Analysis Date:		4/15/2010 3:09:36 PM	
Hexachlorobutadiene	ND	µg/L	10								
Hexachlorocyclopentadiene	ND	µg/L	10								
Hexachloroethane	ND	µg/L	10								
Indeno(1,2,3-cd)pyrene	ND	µg/L	10								
Isophorone	ND	µg/L	10								
2-Methylnaphthalene	ND	µg/L	10								
2-Methylphenol	ND	µg/L	10								
3+4-Methylphenol	ND	µg/L	10								
N-Nitrosodi-n-propylamine	ND	µg/L	10								
N-Nitrosodimethylamine	ND	µg/L	10								
N-Nitrosodiphenylamine	ND	µg/L	10								
Naphthalene	ND	µg/L	10								
2-Nitroaniline	ND	µg/L	10								
3-Nitroaniline	ND	µg/L	10								
4-Nitroaniline	ND	µg/L	10								
Nitrobenzene	ND	µg/L	10								
2-Nitrophenol	ND	µg/L	10								
[illegible]ophenol	ND	µg/L	10								
Pentachlorophenol	ND	µg/L	20								
Phenanthrene	ND	µg/L	10								
Phenol	ND	µg/L	10								
Pyrene	ND	µg/L	10								
Pyridine	ND	µg/L	10								
1,2,4-Trichlorobenzene	ND	µg/L	10								
2,4,5-Trichlorophenol	ND	µg/L	10								
2,4,6-Trichlorophenol	ND	µg/L	10								
Sample ID: lcs-21933		*LCS*				Batch ID:	**21933**	Analysis Date:		4/14/2010 2:51:29 PM	
Acenaphthene	78.54	µg/L	10	100	0	78.5	33.2	88.1			
4-Chloro-3-methylphenol	139.7	µg/L	10	200	0	69.9	26.5	101			
2-Chlorophenol	131.5	µg/L	10	200	0	65.8	27.5	88.7			
1,4-Dichlorobenzene	65.76	µg/L	10	100	0	65.8	27.2	74.1			
2,4-Dinitrotoluene	80.48	µg/L	10	100	0	80.5	32.6	107			
N-Nitrosodi-n-propylamine	65.90	µg/L	10	100	0	65.9	27.1	96.3			
4-Nitrophenol	96.68	µg/L	10	200	0	48.3	6.78	74.7			
Pentachlorophenol	156.8	µg/L	20	200	0	78.4	14.8	113			
Phenol	72.32	µg/L	10	200	0	36.2	17	53.4			
Pyrene	70.36	µg/L	10	100	0	70.4	27	96.3			
1,2,4-Trichlorobenzene	64.76	µg/L	10	100	0	64.8	30	77.9			
Sample ID: lcsd-21933		*LCSD*				Batch ID:	**21933**	Analysis Date:		4/14/2010 3:21:44 PM	
Acenaphthene	79.58	µg/L	10	100	0	79.6	33.2	88.1	1.32	30.5	
4-Chloro-3-methylphenol	149.9	µg/L	10	200	0	74.9	26.5	101	7.00	28.6	
2-Chlorophenol	137.1	µg/L	10	200	0	68.6	27.5	88.7	4.17	107	
[illegible]-Dichlorobenzene	56.12	µg/L	10	100	0	56.1	27.2	74.1	15.8	62.1	
[illegible]Dinitrotoluene	83.52	µg/L	10	100	0	83.5	32.6	107	3.71	14.7	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004248

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: lcsd-21933		*LCSD*				Batch ID:	**21933**	Analysis Date:		4/14/2010 3:21:44 PM	
N-Nitrosodi-n-propylamine	63.66	µg/L	10	100	0	63.7	27.1	96.3	3.46	30.3	
4-Nitrophenol	96.12	µg/L	10	200	0	48.1	6.78	74.7	0.581	36.3	
Pentachlorophenol	157.2	µg/L	20	200	0	78.6	14.8	113	0.255	49	
Phenol	71.74	µg/L	10	200	0	35.9	17	53.4	0.805	52.4	
Pyrene	73.54	µg/L	10	100	0	73.5	27	96.3	4.42	16.3	
1,2,4-Trichlorobenzene	66.52	µg/L	10	100	0	66.5	30	77.9	2.68	36.4	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Chain-of-Custody Record

Client: Envirotech

Address: 5796 US HWY 64
Farmington, NM 87401

Phone #: 505 632-0615

email ~~or Fax#~~: cwalters@envirotech-inc.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Key Energy

Project #: 98065-0013

Project Manager: Christine Walters

Sampler: Neil Allen

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.0 C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1004248	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
4/12/10	1430	53668-SWD	2 1 Liter Ambers	Cool	1											X					

Date:	Time:	Relinquished by:	Received by:	Remarks:
4/12/10	~~1515~~ 1715 MB		4/13/10 1208	PO # 14848
Date:	Time:	Relinquished by:	Received by:	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Apr-10*

CLIENT:	Envirotech	**Client Sample ID:**	53668-SWD
Lab Order:	1004278	**Collection Date:**	4/12/2010 2:30:00 PM
Project:	Key Energy	**Date Received:**	4/14/2010
Lab ID:	1004278-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 200.8: METALS						Analyst: **TES**
Arsenic	0.0039	0.0025		mg/L	2.5	4/20/2010 2:49:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004278

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 200.8: Metals											
Sample ID: MB-21976		*MBLK*				Batch ID:	**21976**	Analysis Date:	4/20/2010 2:26:04 PM		
Arsenic	ND	mg/L	0.0025								
Sample ID: LLLCS-21976		*LCS*				Batch ID:	**21976**	Analysis Date:	4/20/2010 2:31:38 PM		
Arsenic	0.05223	mg/L	0.0025	0.05	0	104	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Chain-of-Custody Record

Client: Enviratech

Address: 5796 US Hwy 64
Farmington, NM 87401

Phone #: (505-632-0615

email or Fax#: cwalters@enviratech-inc.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Key Energy

Project #: 98065-0013

Project Manager: Christine Walters

Sampler: Neil Allen

On Ice: ☑ Yes ☐ No

Sample Temperature: 8.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1004278	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	X Arsenic ~~7060~~	~~TCLP Metals~~ 200.8 ICPMS			Air Bubbles (Y or N)
4/12/10	14:30	53668-SWD	Plastic 125 mL	HNO_3	-1												X				

Date:	Time:	Relinquished by:	Received by:
4/13/10	16:30	Carl Thompson	9:20 4/14/10
Date:	Time:	Relinquished by:	Received by:

Remarks:
~~*Arsenic analysis using atomic absorption (EPA method 7060)~~
Decision EPA METHOD ~~6020~~ 200.8 ICP
PO# 14861 Speaking with client

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

4-14-10

APPENDIX I

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
El Paso Natural Gas Company - Headquarters: 2 North Nevada Blvd, Colorado Springs, CO 80903,
Regional Division Office: 8725 Alameda Park Dr. NE, Albuquerque, NM 87113
Local Office: El Paso Natural Gas, PO Box 127, Bloomfield, NM 87413

2. **Originating Site: EPNG's – Pipeline 3201 - @ 1036 County Rd, 3000, EPNG's Right of Way, Farmington, NM 87401.**

3. **Location of Material (Street Address, City, State or ULSTR: 1036 County Rd, 3000, EPNG's Right of Way, Farmington, NM 87401.**

4. **Source and Description of Waste: Hydrostatic test water from EPNG's pipeline 3201 west of Bloomfield to Farmington, NM. The water is of relatively good quality in general as the pipeline was cleaner prior to introducing the water. Approximately 3 frac-tanks or 60,000 gallons. Analytical is attached to this form.**

Estimated Volume 1,430 bbl yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 1,430 bbl yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Richard Duarte, [signature] representative or authorized agent for El Paso Natural Gas Company do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Richard Duarte, [signature], representative for El Paso Natural Gas Company do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: M & R Trucking Inc., 281 County Road 350, Farmington, NM (505) 334-5541**

OCD Permitted Waste Management Facility

Name and Facility Permit #: Key Energy Services

Address of Facility: 5651 US Highway 64, Farmington, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☒ **Injection** ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Neil C Allen TITLE: Disposal Operator DATE: 5/12/10

SIGNATURE: _____ TELEPHONE NO.: _____
Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
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Form C-138
Revised March 12, 2007

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2. **Originating Site: EPNG's – Pipeline 3201 - @ 1036 County Rd, 3000, EPNG's Right of Way, Farmington, NM 87401.**

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☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Richard Duarte, [signature], representative for El Paso Natural Gas Company do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: M & R Trucking Inc., 281 County Road 350, Farmington, NM (505) 334-5541**

OCD Permitted Waste Management Facility

Name and Facility Permit #: Key Energy Services

Address of Facility: 5651 US Highway 64, Farmington, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☒ **Injection** ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Neil Allen TITLE: Disposal Operator DATE: 5/12/10

SIGNATURE: _____ TELEPHONE NO.: _____
Waste Management Facility Authorized Agent

Company Name/Address

Chemical Transportation

1945 E. Jackson St.
Phoenix,AZ 85034

Alternate Billing

Report to: Kyle Wilcox

E-mail to: kyle.wilcox@ct-environmental.com

Chain of Custody
Page 2 of 2

Prepared by:

ENVIRONMENTAL Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

Project Description: EPNG Dustin used H_2O

City/State Collected: EMW NM

PHONE:602-253-0383

FAX

Client Project No. 10-387-1Cw

Lab Project #

Collected by: Kyle Wilcox

Site/Facility ID#

P.O.# 10-387-1Cw

Collected by(signature):

Rush? (Lab MUST be Notified)
_____Next Day.....100%
_____Two Day.....50%
_____Three Day.....25%

Date Results Needed

Email?__No_X_Yes
FAX?___No__Yes

Packed on Ice N__ Y X

CoCode (lab use only)
CHETRAPAZ
Template/Prelogin

Shipped Via: Phoenix Service Center

Sample ID	Comp/Grab	Matrix	Depth	Date	Time	No of Cntrs	Cyanide by 335.3/ 250ml HDPE/ ~~H2SO4~~ NaOH >12	pH, Chloride, Flouride, Sulfate, SPCON/ 1L HDPE/ No Pres	RCRA8+Al,B,Ca,Co,Cu,Fe,Mg,Mn,Mo,Ni,Zn/ 500mlHDPE/H						Remarks/contaminant	Sample # (lab only)
3201 Dustin 2	Comp	WW		4-26-10	8:59 A	14	X	X	X							L455992-01

Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH_____ Temp_____

Remarks:

Flow_____ Other_____

Relinquished by:(Signature	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx__ UPS__Other__		Condition (lab use only)
	4-26-10	9:11 Am				
Relinquisher by:(Signature	Date:	Time:	Received by: (Signature)	Temp: 3.1	Bottles Received: 14	OK
Relinquisher by:(Signature	Date:	Time:	Received for lab by: (Signature) Kenn Wade	Date: 4/27/10	Time: 0900	pH Checked: 42 >12 NCF:

D209

Chain of Custody
Page 1 of 2

Company Name/Address

Chemical Transportation
1945 E. Jackson St.
Phoenix,AZ 85034

Alternate Billing

Report to: Kyle Wilcox
E-mail to: kyle.wilcox@ct-environmental.com

Project Description: EPNG Dustin used H2O
City/State Collected: Eunice, NM

PHONE:602-253-0383
FAX:
Client Project No. 10-387-KW
Lab Project #
Collected by: Kyle Wilcox
Site/Facility ID#
P.O.# 10-387-KW
Collected by(Signature):
Packed on Ice N__ Y X

Rush? (Lab MUST be Notified)
____Next Day.....100%
____Two Day.....50%
____Three Day.....25%

Date Results Needed
Email?__No_X_Yes
FAX?___No__Yes

Prepared by:
ENVIRONMENTAL Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

CoCode (lab use only)
CHETRAPAZ
Template/Prelogin
Shipped Via: Phoenix Service Center

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	SUB-Uranium by 200.8/ 500ml HDPE/ HNO3	SUB-Radium 226/228/ 1L HDPE/ HNO3	Nitrate-Nitrite by 353.2/ 250ml HDPE/ H2SO4	Nitrate and Nitrite/ 250ml HDPE/ No Pres	8270-PCB/ 1L Amb/ No Pres	8260B/ 40ml Amb/ HCL	8082-PCB/ 1L Amb/ No Pres	Hardness/ 250ml HDPE/ HNO3	Remarks/contaminant	Sample # (lab only)
3201 Dustin 2	Comp	WW		4-26-10	9:59A	14	X	X	X	X	X	X	X	X		L455992-01

Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____ pH_____ Temp_____

Remarks: Refer to L456000 4341 9900 5757 Flow_____ Other_____

Relinquisher by:(Signature)	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx X UPS__Other__		Condition (lab use only)
	4-26-10	9:39AM				OK
Relinquisher by:(Signature	Date:	Time:	Received by: (Signature)	Temp: 3.1	Bottles Received: 14	
Relinquisher by:(Signature	Date:	Time:	Received for lab by: (Signature) Tom Wolen	Date: 4/27/10	Time: 0900	pH Checked: L2 TR NCF:

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Kyle Wilcox
Chemical Transportation, Inc. - AZ
1945 East Jackson Street
Phoenix, AZ 85034

Report Summary

Thursday May 06, 2010

Report Number: L455992
Samples Received: 04/27/10
Client Project: 10-387-KW

Description: EPNG Dustin Used H2O

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Alan Harvill

T. Alan Harvill , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

ESC
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YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kyle Wilcox
Chemical Transportation, Inc. - AZ
1945 East Jackson Street
Phoenix, AZ 85034

May 06, 2010

ESC Sample # : L455992-01

Date Received : April 27, 2010
Description : EPNG Dustin Used H2O

Site ID :

Sample ID : 3201 DUSTIN 2

Project # : 10-387-KW

Collected By : Kyle Wilcox
Collection Date : 04/26/10 08:59

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	27.	1.0	mg/l	300.0	04/27/10	1
Fluoride	0.91	0.10	mg/l	300.0	04/27/10	1
Nitrate	0.20	0.10	mg/l	300.0	04/27/10	1
Nitrite	BDL	0.10	mg/l	300.0	04/27/10	1
Sulfate	140	25.	mg/l	300.0	05/01/10	5
Cyanide	BDL	0.0050	mg/l	4500CN-E	04/28/10	1
Hardness, Total (mg/L as CaCO3)	230	30.	mg/l	130.1	04/29/10	1
pH	7.5		su	4500H-B	04/29/10	1
Nitrate-Nitrite	0.22	0.10	mg/l	353.2	04/29/10	1
Specific Conductance	560		umhos/cm	120.1	04/28/10	1
Mercury	BDL	0.00020	mg/l	245.1	04/29/10	1
Aluminum	BDL	0.10	mg/l	200.7	05/01/10	1
Arsenic	BDL	0.020	mg/l	200.7	05/01/10	1
Barium	0.079	0.0050	mg/l	200.7	05/01/10	1
Boron	BDL	0.20	mg/l	200.7	05/01/10	1
Cadmium	BDL	0.0050	mg/l	200.7	05/01/10	1
Calcium	60.	0.50	mg/l	200.7	05/01/10	1
Chromium	BDL	0.010	mg/l	200.7	05/01/10	1
Cobalt	BDL	0.010	mg/l	200.7	05/01/10	1
Copper	BDL	0.020	mg/l	200.7	05/01/10	1
Iron	1.2	0.10	mg/l	200.7	05/01/10	1
Lead	BDL	0.0050	mg/l	200.7	05/01/10	1
Magnesium	12.	0.10	mg/l	200.7	05/01/10	1
Manganese	0.33	0.010	mg/l	200.7	05/01/10	1
Molybdenum	0.0092	0.0050	mg/l	200.7	05/01/10	1
Nickel	BDL	0.020	mg/l	200.7	05/01/10	1
Selenium	BDL	0.020	mg/l	200.7	05/01/10	1
Silver	BDL	0.010	mg/l	200.7	05/01/10	1
Zinc	0.11	0.030	mg/l	200.7	05/01/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	05/06/10	1
Acrolein	BDL	0.050	mg/l	8260B	05/06/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	05/06/10	1
Benzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Bromodichloromethane	0.0037	0.0010	mg/l	8260B	05/06/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L455992-01 (PH) - 7.5@19.4c

ESC
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Mt. Juliet, TN 37122
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1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kyle Wilcox
Chemical Transportation, Inc. - AZ
1945 East Jackson Street
Phoenix, AZ 85034

May 06, 2010

ESC Sample # : L455992-01

Date Received : April 27, 2010
Description : EPNG Dustin Used H2O

Site ID :

Sample ID : 3201 DUSTIN 2

Project # : 10-387-KW

Collected By : Kyle Wilcox
Collection Date : 04/26/10 08:59

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bromoform	BDL	0.0010	mg/l	8260B	05/06/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	05/06/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
sec-Butylbenzene	0.0013	0.0010	mg/l	8260B	05/06/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	05/06/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Chlorodibromomethane	0.0018	0.0010	mg/l	8260B	05/06/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	05/06/10	1
Chloroform	0.0082	0.0050	mg/l	8260B	05/06/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	05/06/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	05/06/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	05/06/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	05/06/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	05/06/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	05/06/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	05/06/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	05/06/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	05/06/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	05/06/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	05/06/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	05/06/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	05/06/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	05/06/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	05/06/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	05/06/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	05/06/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	05/06/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	05/06/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Styrene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	05/06/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L455992-01 (PH) - 7.5@19.4c

ESC
L·A·B S·C·I·E·N·C·E·S
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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kyle Wilcox
Chemical Transportation, Inc. - AZ
1945 East Jackson Street
Phoenix, AZ 85034

May 06, 2010

ESC Sample # : L455992-01

Site ID :

Project # : 10-387-KW

Date Received : April 27, 2010
Description : EPNG Dustin Used H2O

Sample ID : 3201 DUSTIN 2

Collected By : Kyle Wilcox
Collection Date : 04/26/10 08:59

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	05/06/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	05/06/10	1
Toluene	BDL	0.0050	mg/l	8260B	05/06/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	05/06/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	05/06/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	05/06/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	05/06/10	1
1,2,4-Trimethylbenzene	0.0011	0.0010	mg/l	8260B	05/06/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	05/06/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	05/06/10	1
Xylenes, Total	0.0032	0.0030	mg/l	8260B	05/06/10	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	05/06/10	1
Dibromofluoromethane	92.1		% Rec.	8260B	05/06/10	1
4-Bromofluorobenzene	107.		% Rec.	8260B	05/06/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.00050	mg/l	8082	05/01/10	1
PCB 1221	BDL	0.00050	mg/l	8082	05/01/10	1
PCB 1232	BDL	0.00050	mg/l	8082	05/01/10	1
PCB 1242	BDL	0.00050	mg/l	8082	05/01/10	1
PCB 1248	BDL	0.00050	mg/l	8082	05/01/10	1
PCB 1254	BDL	0.00050	mg/l	8082	05/01/10	1
PCB 1260	BDL	0.00050	mg/l	8082	05/01/10	1
PCBs Surrogates						
Decachlorobiphenyl	110.		% Rec.	8082	05/01/10	1
Tetrachloro-m-xylene	65.5		% Rec.	8082	05/01/10	1
Base/Neutral Extractables						
Acenaphthene	BDL	0.0010	mg/l	8270C	04/30/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	04/30/10	1
Anthracene	BDL	0.0010	mg/l	8270C	04/30/10	1
Benzidine	BDL	0.010	mg/l	8270C	04/30/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	04/30/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	04/30/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	04/30/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	04/30/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	04/30/10	1
Bis(2-chlorethoxy)methane	BDL	0.010	mg/l	8270C	04/30/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L455992-01 (PH) - 7.5@19.4c

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Est. 1970

REPORT OF ANALYSIS

Kyle Wilcox
Chemical Transportation, Inc. - AZ
1945 East Jackson Street
Phoenix, AZ 85034

May 06, 2010

Date Received : April 27, 2010
Description : EPNG Dustin Used H2O

Sample ID : 3201 DUSTIN 2

Collected By : Kyle Wilcox
Collection Date : 04/26/10 08:59

ESC Sample # : L455992-01

Site ID :

Project # : 10-387-KW

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bis(2-chloroethyl)ether	BDL	0.010	mg/l	8270C	04/30/10	1
Bis(2-chloroisopropyl)ether	BDL	0.010	mg/l	8270C	04/30/10	1
4-Bromophenyl-phenylether	BDL	0.010	mg/l	8270C	04/30/10	1
2-Chloronaphthalene	BDL	0.0010	mg/l	8270C	04/30/10	1
4-Chlorophenyl-phenylether	BDL	0.010	mg/l	8270C	04/30/10	1
Chrysene	BDL	0.0010	mg/l	8270C	04/30/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	04/30/10	1
3,3-Dichlorobenzidine	BDL	0.010	mg/l	8270C	04/30/10	1
2,4-Dinitrotoluene	BDL	0.010	mg/l	8270C	04/30/10	1
2,6-Dinitrotoluene	BDL	0.010	mg/l	8270C	04/30/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	04/30/10	1
Fluorene	BDL	0.0010	mg/l	8270C	04/30/10	1
Hexachlorobenzene	BDL	0.0010	mg/l	8270C	04/30/10	1
Hexachloro-1,3-butadiene	BDL	0.010	mg/l	8270C	04/30/10	1
Hexachlorocyclopentadiene	BDL	0.010	mg/l	8270C	04/30/10	1
Hexachloroethane	BDL	0.010	mg/l	8270C	04/30/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	04/30/10	1
Isophorone	BDL	0.010	mg/l	8270C	04/30/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	04/30/10	1
Nitrobenzene	BDL	0.010	mg/l	8270C	04/30/10	1
n-Nitrosodimethylamine	BDL	0.010	mg/l	8270C	04/30/10	1
n-Nitrosodiphenylamine	BDL	0.010	mg/l	8270C	04/30/10	1
n-Nitrosodi-n-propylamine	BDL	0.010	mg/l	8270C	04/30/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	04/30/10	1
Benzylbutyl phthalate	BDL	0.0010	mg/l	8270C	04/30/10	1
Bis(2-ethylhexyl)phthalate	BDL	0.0010	mg/l	8270C	04/30/10	1
Di-n-butyl phthalate	0.0038	0.0010	mg/l	8270C	04/30/10	1
Diethyl phthalate	BDL	0.0010	mg/l	8270C	04/30/10	1
Dimethyl phthalate	BDL	0.0010	mg/l	8270C	04/30/10	1
Di-n-octyl phthalate	BDL	0.0010	mg/l	8270C	04/30/10	1
Pyrene	BDL	0.0010	mg/l	8270C	04/30/10	1
1,2,4-Trichlorobenzene	BDL	0.010	mg/l	8270C	04/30/10	1
Acid Extractables						
4-Chloro-3-methylphenol	BDL	0.010	mg/l	8270C	04/30/10	1
2-Chlorophenol	BDL	0.010	mg/l	8270C	04/30/10	1
2,4-Dichlorophenol	BDL	0.010	mg/l	8270C	04/30/10	1
2,4-Dimethylphenol	BDL	0.010	mg/l	8270C	04/30/10	1
4,6-Dinitro-2-methylphenol	BDL	0.010	mg/l	8270C	04/30/10	1
2,4-Dinitrophenol	BDL	0.010	mg/l	8270C	04/30/10	1
2-Nitrophenol	BDL	0.010	mg/l	8270C	04/30/10	1
4-Nitrophenol	BDL	0.010	mg/l	8270C	04/30/10	1
Pentachlorophenol	BDL	0.010	mg/l	8270C	04/30/10	1
Phenol	BDL	0.010	mg/l	8270C	04/30/10	1
2,4,6-Trichlorophenol	BDL	0.010	mg/l	8270C	04/30/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L455992-01 (PH) - 7.5@19.4c

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REPORT OF ANALYSIS

Kyle Wilcox
Chemical Transportation, Inc. - AZ
1945 East Jackson Street
Phoenix, AZ 85034

May 06, 2010

ESC Sample # : L455992-01

Date Received : April 27, 2010
Description : EPNG Dustin Used H2O

Site ID :

Sample ID : 3201 DUSTIN 2

Project # : 10-387-KW

Collected By : Kyle Wilcox
Collection Date : 04/26/10 08:59

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
2-Fluorophenol	38.9		% Rec.	8270C	04/30/10	1
Phenol-d5	28.2		% Rec.	8270C	04/30/10	1
Nitrobenzene-d5	44.8		% Rec.	8270C	04/30/10	1
2-Fluorobiphenyl	57.3		% Rec.	8270C	04/30/10	1
2,4,6-Tribromophenol	81.1		% Rec.	8270C	04/30/10	1
p-Terphenyl-d14	79.1		% Rec.	8270C	04/30/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 05/06/10 10:32 Printed: 05/06/10 14:20
L455992-01 (PH) - 7.5@19.4c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L455992-01	WG475580	SAMP	pH	R1200272	T8
	WG475823	SAMP	Hardness, Total (mg/L as CaCO3)	R1200364	J6
	WG476864	SAMP	Bromoform	R1206628	J4
	WG476864	SAMP	Bromomethane	R1206628	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Kyle Wilcox
1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Chloride	< 1	mg/l			WG475306	04/27/10 10:39
Fluoride	< .1	mg/l			WG475306	04/27/10 10:39
Nitrate	< .1	mg/l			WG475306	04/27/10 10:39
Nitrite	< .1	mg/l			WG475306	04/27/10 10:39
Cyanide	< .005	mg/l			WG475230	04/28/10 09:25
Specific Conductance	1.40	umhos/cm			WG475486	04/28/10 17:00
Mercury	< .0002	mg/l			WG475375	04/29/10 11:05
pH	5.20	su			WG475580	04/29/10 12:25
Nitrate-Nitrite	< .1	mg/l			WG475615	04/29/10 02:32
Hardness, Total (mg/L as CaCO3)	< 30	mg/l			WG475823	04/29/10 14:16
1,2,4-Trichlorobenzene	< .01	mg/l			WG475655	04/30/10 08:13
2,4,6-Trichlorophenol	< .01	mg/l			WG475655	04/30/10 08:13
2,4-Dichlorophenol	< .01	mg/l			WG475655	04/30/10 08:13
2,4-Dimethylphenol	< .01	mg/l			WG475655	04/30/10 08:13
2,4-Dinitrophenol	< .01	mg/l			WG475655	04/30/10 08:13
2,4-Dinitrotoluene	< .01	mg/l			WG475655	04/30/10 08:13
2,6-Dinitrotoluene	< .01	mg/l			WG475655	04/30/10 08:13
2-Chloronaphthalene	< .001	mg/l			WG475655	04/30/10 08:13
2-Chlorophenol	< .01	mg/l			WG475655	04/30/10 08:13
2-Nitrophenol	< .01	mg/l			WG475655	04/30/10 08:13
3,3-Dichlorobenzidine	< .01	mg/l			WG475655	04/30/10 08:13
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG475655	04/30/10 08:13
4-Bromophenyl-phenylether	< .01	mg/l			WG475655	04/30/10 08:13
4-Chloro-3-methylphenol	< .01	mg/l			WG475655	04/30/10 08:13
4-Chlorophenyl-phenylether	< .01	mg/l			WG475655	04/30/10 08:13
4-Nitrophenol	< .01	mg/l			WG475655	04/30/10 08:13
Acenaphthene	< .001	mg/l			WG475655	04/30/10 08:13
Acenaphthylene	< .001	mg/l			WG475655	04/30/10 08:13
Anthracene	< .001	mg/l			WG475655	04/30/10 08:13
Benzidine	< .01	mg/l			WG475655	04/30/10 08:13
Benzo(a)anthracene	< .001	mg/l			WG475655	04/30/10 08:13
Benzo(a)pyrene	< .001	mg/l			WG475655	04/30/10 08:13
Benzo(b)fluoranthene	< .001	mg/l			WG475655	04/30/10 08:13
Benzo(g,h,i)perylene	< .001	mg/l			WG475655	04/30/10 08:13
Benzo(k)fluoranthene	< .001	mg/l			WG475655	04/30/10 08:13
Benzylbutyl phthalate	< .001	mg/l			WG475655	04/30/10 08:13
Bis(2-chlorethoxy)methane	< .01	mg/l			WG475655	04/30/10 08:13
Bis(2-chloroethyl)ether	< .01	mg/l			WG475655	04/30/10 08:13
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG475655	04/30/10 08:13
Bis(2-ethylhexyl)phthalate	< .001	mg/l			WG475655	04/30/10 08:13
Chrysene	< .001	mg/l			WG475655	04/30/10 08:13
Di-n-butyl phthalate	< .001	mg/l			WG475655	04/30/10 08:13
Di-n-octyl phthalate	< .001	mg/l			WG475655	04/30/10 08:13
Dibenz(a,h)anthracene	< .001	mg/l			WG475655	04/30/10 08:13
Diethyl phthalate	< .001	mg/l			WG475655	04/30/10 08:13

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Level II

L455992

May 06, 2010

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Dimethyl phthalate	< .001	mg/l			WG475655	04/30/10 08:13
Fluoranthene	< .001	mg/l			WG475655	04/30/10 08:13
Fluorene	< .001	mg/l			WG475655	04/30/10 08:13
Hexachloro-1,3-butadiene	< .01	mg/l			WG475655	04/30/10 08:13
Hexachlorobenzene	< .001	mg/l			WG475655	04/30/10 08:13
Hexachlorocyclopentadiene	< .01	mg/l			WG475655	04/30/10 08:13
Hexachloroethane	< .01	mg/l			WG475655	04/30/10 08:13
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG475655	04/30/10 08:13
Isophorone	< .01	mg/l			WG475655	04/30/10 08:13
n-Nitrosodi-n-propylamine	< .01	mg/l			WG475655	04/30/10 08:13
n-Nitrosodimethylamine	< .01	mg/l			WG475655	04/30/10 08:13
n-Nitrosodiphenylamine	< .01	mg/l			WG475655	04/30/10 08:13
Naphthalene	< .001	mg/l			WG475655	04/30/10 08:13
Nitrobenzene	< .01	mg/l			WG475655	04/30/10 08:13
Pentachlorophenol	< .001	mg/l			WG475655	04/30/10 08:13
Phenanthrene	< .001	mg/l			WG475655	04/30/10 08:13
Phenol	< .01	mg/l			WG475655	04/30/10 08:13
Pyrene	< .001	mg/l			WG475655	04/30/10 08:13
2,4,6-Tribromophenol		mg/l	77.13	10-148	WG475655	04/30/10 08:13
2-Fluorobiphenyl		mg/l	85.54	26-122	WG475655	04/30/10 08:13
2-Fluorophenol		mg/l	38.98	10-87	WG475655	04/30/10 08:13
Nitrobenzene-d5		mg/l	65.82	12-120	WG475655	04/30/10 08:13
Phenol-d5		mg/l	27.54	10-67	WG475655	04/30/10 08:13
p-Terphenyl-d14		mg/l	105.1	34-149	WG475655	04/30/10 08:13
PCB 1016	< .0005	mg/l			WG475727	04/30/10 09:19
PCB 1221	< .0005	mg/l			WG475727	04/30/10 09:19
PCB 1232	< .0005	mg/l			WG475727	04/30/10 09:19
PCB 1242	< .0005	mg/l			WG475727	04/30/10 09:19
PCB 1248	< .0005	mg/l			WG475727	04/30/10 09:19
PCB 1254	< .0005	mg/l			WG475727	04/30/10 09:19
PCB 1260	< .0005	mg/l			WG475727	04/30/10 09:19
Decachlorobiphenyl		% Rec.	71.71	10-122.6	WG475727	04/30/10 09:19
Tetrachloro-m-xylene		% Rec.	63.79	15.3-114.2	WG475727	04/30/10 09:19
Aluminum	< .1	mg/l			WG475915	05/01/10 00:17
Arsenic	< .02	mg/l			WG475915	05/01/10 00:17
Barium	< .005	mg/l			WG475915	05/01/10 00:17
Boron	< .2	mg/l			WG475915	05/01/10 00:17
Cadmium	< .005	mg/l			WG475915	05/01/10 00:17
Calcium	< .5	mg/l			WG475915	05/01/10 00:17
Chromium	< .01	mg/l			WG475915	05/01/10 00:17
Cobalt	< .01	mg/l			WG475915	05/01/10 00:17
Copper	< .02	mg/l			WG475915	05/01/10 00:17
Iron	< .1	mg/l			WG475915	05/01/10 00:17
Lead	< .005	mg/l			WG475915	05/01/10 00:17
Magnesium	< .1	mg/l			WG475915	05/01/10 00:17
Manganese	< .01	mg/l			WG475915	05/01/10 00:17
Molybdenum	< .005	mg/l			WG475915	05/01/10 00:17
Nickel	< .02	mg/l			WG475915	05/01/10 00:17
Selenium	< .02	mg/l			WG475915	05/01/10 00:17
Silver	< .01	mg/l			WG475915	05/01/10 00:17
Zinc	< .03	mg/l			WG475915	05/01/10 00:17
Sulfate	< 5	mg/l			WG476192	05/01/10 07:24

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,1,1-Trichloroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,1,2-Trichloroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,1-Dichloroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,1-Dichloroethene	< .001	mg/l			WG476864	05/06/10 00:38
1,1-Dichloropropene	< .001	mg/l			WG476864	05/06/10 00:38
1,2,3-Trichlorobenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,2,3-Trichloropropane	< .001	mg/l			WG476864	05/06/10 00:38
1,2,3-Trimethylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,2,4-Trichlorobenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,2,4-Trimethylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG476864	05/06/10 00:38
1,2-Dibromoethane	< .001	mg/l			WG476864	05/06/10 00:38
1,2-Dichlorobenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,2-Dichloroethane	< .001	mg/l			WG476864	05/06/10 00:38
1,2-Dichloropropane	< .001	mg/l			WG476864	05/06/10 00:38
1,3,5-Trimethylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,3-Dichlorobenzene	< .001	mg/l			WG476864	05/06/10 00:38
1,3-Dichloropropane	< .001	mg/l			WG476864	05/06/10 00:38
1,4-Dichlorobenzene	< .001	mg/l			WG476864	05/06/10 00:38
2,2-Dichloropropane	< .001	mg/l			WG476864	05/06/10 00:38
2-Butanone (MEK)	< .01	mg/l			WG476864	05/06/10 00:38
2-Chlorotoluene	< .001	mg/l			WG476864	05/06/10 00:38
4-Chlorotoluene	< .001	mg/l			WG476864	05/06/10 00:38
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG476864	05/06/10 00:38
Acetone	< .05	mg/l			WG476864	05/06/10 00:38
Acrolein	< .05	mg/l			WG476864	05/06/10 00:38
Acrylonitrile	< .01	mg/l			WG476864	05/06/10 00:38
Benzene	< .001	mg/l			WG476864	05/06/10 00:38
Bromobenzene	< .001	mg/l			WG476864	05/06/10 00:38
Bromodichloromethane	< .001	mg/l			WG476864	05/06/10 00:38
Bromoform	< .001	mg/l			WG476864	05/06/10 00:38
Bromomethane	< .005	mg/l			WG476864	05/06/10 00:38
Carbon tetrachloride	< .001	mg/l			WG476864	05/06/10 00:38
Chlorobenzene	< .001	mg/l			WG476864	05/06/10 00:38
Chlorodibromomethane	< .001	mg/l			WG476864	05/06/10 00:38
Chloroethane	< .001	mg/l			WG476864	05/06/10 00:38
Chloroform	< .005	mg/l			WG476864	05/06/10 00:38
Chloromethane	< .001	mg/l			WG476864	05/06/10 00:38
cis-1,2-Dichloroethene	< .001	mg/l			WG476864	05/06/10 00:38
cis-1,3-Dichloropropene	< .001	mg/l			WG476864	05/06/10 00:38
Di-isopropyl ether	< .001	mg/l			WG476864	05/06/10 00:38
Dibromomethane	< .001	mg/l			WG476864	05/06/10 00:38
Dichlorodifluoromethane	< .005	mg/l			WG476864	05/06/10 00:38
Ethylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
Hexachloro-1,3-butadiene	< .001	mg/l			WG476864	05/06/10 00:38
Isopropylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
Methyl tert-butyl ether	< .001	mg/l			WG476864	05/06/10 00:38
Methylene Chloride	< .005	mg/l			WG476864	05/06/10 00:38
n-Butylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
n-Propylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
Naphthalene	< .005	mg/l			WG476864	05/06/10 00:38
p-Isopropyltoluene	< .001	mg/l			WG476864	05/06/10 00:38
sec-Butylbenzene	< .001	mg/l			WG476864	05/06/10 00:38
Styrene	< .001	mg/l			WG476864	05/06/10 00:38
tert-Butylbenzene	< .001	mg/l			WG476864	05/06/10 00:38

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Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Tetrachloroethene	< .001	mg/l			WG476864	05/06/10 00:38
Toluene	< .005	mg/l			WG476864	05/06/10 00:38
trans-1,2-Dichloroethene	< .001	mg/l			WG476864	05/06/10 00:38
trans-1,3-Dichloropropene	< .001	mg/l			WG476864	05/06/10 00:38
Trichloroethene	< .001	mg/l			WG476864	05/06/10 00:38
Trichlorofluoromethane	< .005	mg/l			WG476864	05/06/10 00:38
Vinyl chloride	< .001	mg/l			WG476864	05/06/10 00:38
Xylenes, Total	< .003	mg/l			WG476864	05/06/10 00:38
4-Bromofluorobenzene		% Rec.	105.8	75-128	WG476864	05/06/10 00:38
Dibromofluoromethane		% Rec.	92.19	79-125	WG476864	05/06/10 00:38
Toluene-d8		% Rec.	102.2	87-114	WG476864	05/06/10 00:38

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Chloride	mg/l	8.30	8.20	1.57	20	L455382-03	WG475306
Chloride	mg/l	120.	120.	1.68	20	L455986-02	WG475306
Fluoride	mg/l	1.60	1.56	0	20	L455986-02	WG475306
Nitrate	mg/l	0	0	0	20	L455986-02	WG475306
Nitrite	mg/l	0	0	0	20	L455986-02	WG475306
Chloride	mg/l	22.0	22.0	1.83	20	L455481-01	WG475306
Fluoride	mg/l	1.80	1.75	1.70	20	L455481-01	WG475306
Nitrate	mg/l	0	0	0	20	L455481-01	WG475306
Nitrite	mg/l	0	0	0	20	L455481-01	WG475306
Cyanide	mg/l	0.00610	0.00550	10.3	20	L455813-04	WG475230
Cyanide	mg/l	0	0	0	20	L455995-02	WG475230
Specific Conductance	umhos/cm	2000	2000	1.73	20	L455910-02	WG475486
Mercury	mg/l	0	0	0	20	L455662-01	WG475375
pH	su	7.50	7.50	0	1	L455992-01	WG475580
pH	su	6.50	6.50	0	1	L456220-02	WG475580
Nitrate-Nitrite	mg/l	0.320	0.320	1.24	20	L456384-01	WG475615
Nitrate-Nitrite	mg/l	0.250	0.240	5.27	20	L454658-01	WG475615
Hardness, Total (mg/L as CaCO3)	mg/l	920.	910.	0.548	20	L456215-01	WG475823
Hardness, Total (mg/L as CaCO3)	mg/l	75.0	76.0	1.86	20	L455944-02	WG475823
Aluminum	mg/l	0	0.0747	NA	20	L456001-02	WG475915
Arsenic	mg/l	0	0	0	20	L456001-02	WG475915
Barium	mg/l	0.00920	0.00904	1.54	20	L456001-02	WG475915
Boron	mg/l	0	0.0417	NA	20	L456001-02	WG475915
Cadmium	mg/l	0	0.000240	NA	20	L456001-02	WG475915
Calcium	mg/l	12.0	11.9	3.31	20	L456001-02	WG475915
Chromium	mg/l	0	0.000600	NA	20	L456001-02	WG475915
Cobalt	mg/l	0	0.000600	NA	20	L456001-02	WG475915
Copper	mg/l	0	0.000900	NA	20	L456001-02	WG475915
Iron	mg/l	1.30	1.30	1.55	20	L456001-02	WG475915
Lead	mg/l	0	0	0	20	L456001-02	WG475915

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Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Magnesium	mg/l	0.830	0.844	1.55	20	L456001-02	WG475915
Manganese	mg/l	0.0810	0.0813	0.741	20	L456001-02	WG475915
Molybdenum	mg/l	0.00580	0.00486	17.6	20	L456001-02	WG475915
Nickel	mg/l	0	0	0	20	L456001-02	WG475915
Selenium	mg/l	0	0.00160	NA	20	L456001-02	WG475915
Silver	mg/l	0	0	0	20	L456001-02	WG475915
Zinc	mg/l	0	0	0	20	L456001-02	WG475915
Sulfate	mg/l	12.0	12.0	3.28	20	L456156-01	WG476192

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
Chloride	mg/l	40	40.9	102.	90-110	WG475306
Fluoride	mg/l	8	8.36	105.	90-110	WG475306
Nitrate	mg/l	8	8.41	105.	90-110	WG475306
Nitrite	mg/l	8	8.24	103.	90-110	WG475306
Cyanide	mg/l	.1	0.0993	99.3	90-110	WG475230
Specific Conductance	umhos/cm	406	410.	101.	85-115	WG475486
Mercury	mg/l	.003	0.00283	94.3	85-115	WG475375
pH	su	6.46	6.40	99.1	97.9-100.8	WG475580
Nitrate-Nitrite	mg/l	5	5.28	106.	85-115	WG475615
Hardness, Total (mg/L as CaCO3)	mg/l	200	214.	107.	85-115	WG475823
1,2,4-Trichlorobenzene	mg/l	.01	0.00677	67.7	26-103	WG475655
2,4,6-Trichlorophenol	mg/l	.01	0.00805	80.5	49-118	WG475655
2,4-Dichlorophenol	mg/l	.01	0.00770	77.0	46-115	WG475655
2,4-Dimethylphenol	mg/l	.01	0.00698	69.8	40-124	WG475655
2,4-Dinitrophenol	mg/l	.01	0.00811	81.1	10-125	WG475655
2,4-Dinitrotoluene	mg/l	.01	0.00878	87.8	56-128	WG475655
2,6-Dinitrotoluene	mg/l	.01	0.00848	84.8	56-121	WG475655
2-Chloronaphthalene	mg/l	.01	0.00808	80.8	44-110	WG475655
2-Chlorophenol	mg/l	.01	0.00641	64.1	38-114	WG475655
2-Nitrophenol	mg/l	.01	0.00838	83.8	35-118	WG475655
3,3-Dichlorobenzidine	mg/l	.01	0.00874	87.4	46-145	WG475655
4,6-Dinitro-2-methylphenol	mg/l	.01	0.00793	79.3	24-119	WG475655
4-Bromophenyl-phenylether	mg/l	.01	0.00890	89.0	45-105	WG475655
4-Chloro-3-methylphenol	mg/l	.01	0.00750	75.0	47-116	WG475655
4-Chlorophenyl-phenylether	mg/l	.01	0.00868	86.8	49-116	WG475655
4-Nitrophenol	mg/l	.01	0.00304	30.4	10-66	WG475655
Acenaphthene	mg/l	.01	0.00810	81.0	48-110	WG475655
Acenaphthylene	mg/l	.01	0.00872	87.2	48-113	WG475655
Anthracene	mg/l	.01	0.00879	87.9	55-127	WG475655
Benzidine	mg/l	.01	0	0	0-46	WG475655
Benzo(a)anthracene	mg/l	.01	0.00889	88.9	57-115	WG475655

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Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Benzo(a)pyrene	mg/l	.01	0.00885	88.5	63-125	WG475655
Benzo(b)fluoranthene	mg/l	.01	0.00886	88.6	50-123	WG475655
Benzo(g,h,i)perylene	mg/l	.01	0.00825	82.5	39-143	WG475655
Benzo(k)fluoranthene	mg/l	.01	0.00916	91.6	45-126	WG475655
Benzylbutyl phthalate	mg/l	.01	0.00903	90.3	22-154	WG475655
Bis(2-chlorethoxy)methane	mg/l	.01	0.00909	90.9	42-116	WG475655
Bis(2-chloroethyl)ether	mg/l	.01	0.00817	81.7	26-115	WG475655
Bis(2-chloroisopropyl)ether	mg/l	.01	0.00783	78.3	32-115	WG475655
Bis(2-ethylhexyl)phthalate	mg/l	.01	0.0101	101.	47-143	WG475655
Chrysene	mg/l	.01	0.00903	90.3	58-113	WG475655
Di-n-butyl phthalate	mg/l	.01	0.00968	96.8	51-131	WG475655
Di-n-octyl phthalate	mg/l	.01	0.00985	98.5	51-138	WG475655
Dibenz(a,h)anthracene	mg/l	.01	0.00859	85.9	39-144	WG475655
Diethyl phthalate	mg/l	.01	0.00842	84.2	36-128	WG475655
Dimethyl phthalate	mg/l	.01	0.00668	66.8	10-135	WG475655
Fluoranthene	mg/l	.01	0.00897	89.7	53-119	WG475655
Fluorene	mg/l	.01	0.00845	84.5	49-116	WG475655
Hexachloro-1,3-butadiene	mg/l	.01	0.00724	72.4	21-116	WG475655
Hexachlorobenzene	mg/l	.01	0.00816	81.6	51-121	WG475655
Hexachlorocyclopentadiene	mg/l	.01	0.00727	72.7	4-126	WG475655
Hexachloroethane	mg/l	.01	0.00590	59.0	15-109	WG475655
Indeno(1,2,3-cd)pyrene	mg/l	.01	0.00833	83.3	40-143	WG475655
Isophorone	mg/l	.01	0.00818	81.8	48-126	WG475655
n-Nitrosodi-n-propylamine	mg/l	.01	0.00879	87.9	47-122	WG475655
n-Nitrosodimethylamine	mg/l	.01	0.00361	36.1	11-69	WG475655
n-Nitrosodiphenylamine	mg/l	.01	0.00727	72.7	59-143	WG475655
Naphthalene	mg/l	.01	0.00752	75.2	29-103	WG475655
Nitrobenzene	mg/l	.01	0.00738	73.8	31-105	WG475655
Pentachlorophenol	mg/l	.01	0.00697	69.7	20-122	WG475655
Phenanthrene	mg/l	.01	0.00826	82.6	54-112	WG475655
Phenol	mg/l	.01	0.00283	28.3	17-52	WG475655
Pyrene	mg/l	.01	0.00892	89.2	46-130	WG475655
2,4,6-Tribromophenol				81.76	10-148	WG475655
2-Fluorobiphenyl				81.85	26-122	WG475655
2-Fluorophenol				37.60	10-87	WG475655
Nitrobenzene-d5				73.23	12-120	WG475655
Phenol-d5				27.61	10-67	WG475655
p-Terphenyl-d14				103.6	34-149	WG475655
PCB 1260	mg/l	.0005	0.000478	95.7	46-126	WG475727
Decachlorobiphenyl				87.92	10-122.6	WG475727
Tetrachloro-m-xylene				64.69	15.3-114.2	WG475727
Aluminum	mg/l	1	0.998	99.8	85-115	WG475915
Arsenic	mg/l	1	0.984	98.4	85-115	WG475915
Barium	mg/l	1	0.967	96.7	85-115	WG475915
Boron	mg/l	1	0.977	97.7	85-115	WG475915
Cadmium	mg/l	1	0.978	97.8	85-115	WG475915
Calcium	mg/l	10	9.81	98.1	85-115	WG475915
Chromium	mg/l	1	1.01	101.	85-115	WG475915
Cobalt	mg/l	1	1.05	105.	85-115	WG475915
Copper	mg/l	1	1.02	102.	85-115	WG475915
Iron	mg/l	1	1.07	107.	85-115	WG475915
Lead	mg/l	1	1.04	104.	85-115	WG475915
Magnesium	mg/l	10	10.5	105.	85-115	WG475915
Manganese	mg/l	1	0.966	96.6	85-115	WG475915
Molybdenum	mg/l	1	1.02	102.	85-115	WG475915

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Nickel	mg/l	1	0.986	98.6	85-115	WG475915
Selenium	mg/l	1	0.950	95.0	85-115	WG475915
Silver	mg/l	1	1.00	100.	85-115	WG475915
Zinc	mg/l	1	0.944	94.4	85-115	WG475915
Sulfate	mg/l	40	39.2	98.0	90-110	WG476192
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0224	89.6	75-134	WG476864
1,1,1-Trichloroethane	mg/l	.025	0.0213	85.0	67-137	WG476864
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0239	95.7	72-128	WG476864
1,1,2-Trichloroethane	mg/l	.025	0.0251	101.	79-123	WG476864
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	.025	0.0240	96.0	51-149	WG476864
1,1-Dichloroethane	mg/l	.025	0.0236	94.6	67-133	WG476864
1,1-Dichloroethene	mg/l	.025	0.0228	91.3	60-130	WG476864
1,1-Dichloropropene	mg/l	.025	0.0246	98.3	68-132	WG476864
1,2,3-Trichlorobenzene	mg/l	.025	0.0236	94.4	63-138	WG476864
1,2,3-Trichloropropane	mg/l	.025	0.0236	94.4	68-130	WG476864
1,2,3-Trimethylbenzene	mg/l	.025	0.0243	97.1	70-127	WG476864
1,2,4-Trichlorobenzene	mg/l	.025	0.0237	94.6	65-137	WG476864
1,2,4-Trimethylbenzene	mg/l	.025	0.0248	99.4	72-135	WG476864
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0191	76.5	55-134	WG476864
1,2-Dibromoethane	mg/l	.025	0.0250	99.8	75-126	WG476864
1,2-Dichlorobenzene	mg/l	.025	0.0247	98.9	75-122	WG476864
1,2-Dichloroethane	mg/l	.025	0.0244	97.5	63-137	WG476864
1,2-Dichloropropane	mg/l	.025	0.0254	101.	74-122	WG476864
1,3,5-Trimethylbenzene	mg/l	.025	0.0252	101.	73-134	WG476864
1,3-Dichlorobenzene	mg/l	.025	0.0249	99.4	73-131	WG476864
1,3-Dichloropropane	mg/l	.025	0.0251	100.	77-119	WG476864
1,4-Dichlorobenzene	mg/l	.025	0.0250	100.	70-121	WG476864
2,2-Dichloropropane	mg/l	.025	0.0206	82.3	46-151	WG476864
2-Butanone (MEK)	mg/l	.125	0.131	105.	53-132	WG476864
2-Chlorotoluene	mg/l	.025	0.0250	99.9	74-128	WG476864
4-Chlorotoluene	mg/l	.025	0.0246	98.3	74-130	WG476864
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.126	101.	60-142	WG476864
Acetone	mg/l	.125	0.136	109.	48-134	WG476864
Acrolein	mg/l	.125	0.123	98.6	6-182	WG476864
Acrylonitrile	mg/l	.125	0.130	104.	60-140	WG476864
Benzene	mg/l	.025	0.0242	96.9	67-126	WG476864
Bromobenzene	mg/l	.025	0.0238	95.3	76-123	WG476864
Bromodichloromethane	mg/l	.025	0.0223	89.1	68-133	WG476864
Bromoform	mg/l	.025	0.0141	56.3*	60-139	WG476864
Bromomethane	mg/l	.025	0.0173	69.2	45-175	WG476864
Carbon tetrachloride	mg/l	.025	0.0215	86.2	64-141	WG476864
Chlorobenzene	mg/l	.025	0.0253	101.	77-125	WG476864
Chlorodibromomethane	mg/l	.025	0.0198	79.1	73-138	WG476864
Chloroethane	mg/l	.025	0.0257	103.	49-155	WG476864
Chloroform	mg/l	.025	0.0226	90.4	66-126	WG476864
Chloromethane	mg/l	.025	0.0205	81.9	45-152	WG476864
cis-1,2-Dichloroethene	mg/l	.025	0.0230	92.1	72-128	WG476864
cis-1,3-Dichloropropene	mg/l	.025	0.0232	92.7	73-131	WG476864
Di-isopropyl ether	mg/l	.025	0.0230	92.1	63-139	WG476864
Dibromomethane	mg/l	.025	0.0239	95.6	73-125	WG476864
Dichlorodifluoromethane	mg/l	.025	0.0227	91.0	39-189	WG476864
Ethylbenzene	mg/l	.025	0.0260	104.	76-129	WG476864
Hexachloro-1,3-butadiene	mg/l	.025	0.0215	86.1	67-135	WG476864
Isopropylbenzene	mg/l	.025	0.0253	101.	73-132	WG476864
Methyl tert-butyl ether	mg/l	.025	0.0218	87.3	51-142	WG476864

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Est. 1970

Chemical Transportation, Inc. - AZ
Kyle Wilcox
1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Methylene Chloride	mg/l	.025	0.0222	88.9	64-125	WG476864
n-Butylbenzene	mg/l	.025	0.0244	97.5	63-142	WG476864
n-Propylbenzene	mg/l	.025	0.0252	101.	71-132	WG476864
Naphthalene	mg/l	.025	0.0243	97.0	56-145	WG476864
p-Isopropyltoluene	mg/l	.025	0.0255	102.	68-138	WG476864
sec-Butylbenzene	mg/l	.025	0.0253	101.	70-135	WG476864
Styrene	mg/l	.025	0.0248	99.1	78-130	WG476864
tert-Butylbenzene	mg/l	.025	0.0250	99.9	72-134	WG476864
Tetrachloroethene	mg/l	.025	0.0262	105.	67-135	WG476864
Toluene	mg/l	.025	0.0249	99.8	72-122	WG476864
trans-1,2-Dichloroethene	mg/l	.025	0.0227	90.8	67-129	WG476864
trans-1,3-Dichloropropene	mg/l	.025	0.0209	83.7	66-137	WG476864
Trichloroethene	mg/l	.025	0.0245	98.2	74-126	WG476864
Trichlorofluoromethane	mg/l	.025	0.0250	99.9	54-156	WG476864
Vinyl chloride	mg/l	.025	0.0301	121.	55-153	WG476864
Xylenes, Total	mg/l	.075	0.0774	103.	75-128	WG476864
4-Bromofluorobenzene				100.2	75-128	WG476864
Dibromofluoromethane				94.44	79-125	WG476864
Toluene-d8				102.6	87-114	WG476864

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Chloride	mg/l	40.8	40.9	102.	90-110	0.245	20	WG475306
Fluoride	mg/l	8.35	8.36	104.	90-110	0.120	20	WG475306
Nitrate	mg/l	8.36	8.41	104.	90-110	0.596	20	WG475306
Nitrite	mg/l	8.23	8.24	103.	90-110	0.121	20	WG475306
Cyanide	mg/l	0.106	0.0993	106.	90-110	6.53	20	WG475230
Specific Conductance	umhos/	410.	410.	101.	85-115	0	20	WG475486
pH	su	6.40	6.40	99.0	97.9-100.8	0	20	WG475580
Nitrate-Nitrite	mg/l	5.18	5.28	104.	85-115	1.91	20	WG475615
Hardness, Total (mg/L as CaCO3)	mg/l	213.	214.	106.	85-115	0.468	20	WG475823
1,2,4-Trichlorobenzene	mg/l	0.00728	0.00677	73.0	26-103	7.26	38	WG475655
2,4,6-Trichlorophenol	mg/l	0.00820	0.00805	82.0	49-118	1.85	28	WG475655
2,4-Dichlorophenol	mg/l	0.00795	0.00770	79.0	46-115	3.17	28	WG475655
2,4-Dimethylphenol	mg/l	0.00714	0.00698	71.0	40-124	2.21	36	WG475655
2,4-Dinitrophenol	mg/l	0.00720	0.00811	72.0	10-125	12.0	50	WG475655
2,4-Dinitrotoluene	mg/l	0.00914	0.00878	91.0	56-128	4.09	24	WG475655
2,6-Dinitrotoluene	mg/l	0.00876	0.00848	88.0	56-121	3.24	23	WG475655
2-Chloronaphthalene	mg/l	0.00836	0.00808	84.0	44-110	3.31	30	WG475655
2-Chlorophenol	mg/l	0.00670	0.00641	67.0	38-114	4.39	36	WG475655
2-Nitrophenol	mg/l	0.00876	0.00838	88.0	35-118	4.40	35	WG475655
3,3-Dichlorobenzidine	mg/l	0.00879	0.00874	88.0	46-145	0.532	31	WG475655
4,6-Dinitro-2-methylphenol	mg/l	0.00749	0.00793	75.0	24-119	5.82	50	WG475655
4-Bromophenyl-phenylether	mg/l	0.00876	0.00890	88.0	45-105	1.59	26	WG475655
4-Chloro-3-methylphenol	mg/l	0.00741	0.00750	74.0	47-116	1.14	22	WG475655
4-Chlorophenyl-phenylether	mg/l	0.00869	0.00868	87.0	49-116	0.0569	26	WG475655

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Quality Assurance Report
Level II

L455992

May 06, 2010

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
4-Nitrophenol	mg/l	0.00297	0.00304	30.0	10-66	2.52	37	WG475655
Acenaphthene	mg/l	0.00843	0.00810	84.0	48-110	4.04	26	WG475655
Acenaphthylene	mg/l	0.00895	0.00872	90.0	48-113	2.66	28	WG475655
Anthracene	mg/l	0.00877	0.00879	88.0	55-127	0.204	24	WG475655
Benzidine	mg/l	0	0	0.00	0-46	0	50	WG475655
Benzo(a)anthracene	mg/l	0.00909	0.00889	91.0	57-115	2.31	20	WG475655
Benzo(a)pyrene	mg/l	0.00894	0.00885	89.0	63-125	1.04	22	WG475655
Benzo(b)fluoranthene	mg/l	0.00952	0.00886	95.0	50-123	7.14	32	WG475655
Benzo(g,h,i)perylene	mg/l	0.00795	0.00825	80.0	39-143	3.68	31	WG475655
Benzo(k)fluoranthene	mg/l	0.00865	0.00916	86.0	45-126	5.65	37	WG475655
Benzylbutyl phthalate	mg/l	0.00913	0.00903	91.0	22-154	1.08	29	WG475655
Bis(2-chlorethoxy)methane	mg/l	0.00925	0.00909	92.0	42-116	1.68	38	WG475655
Bis(2-chloroethyl)ether	mg/l	0.00874	0.00817	87.0	26-115	6.81	50	WG475655
Bis(2-chloroisopropyl)ether	mg/l	0.00857	0.00783	86.0	32-115	9.02	47	WG475655
Bis(2-ethylhexyl)phthalate	mg/l	0.0100	0.0101	100.	47-143	0.677	24	WG475655
Chrysene	mg/l	0.00904	0.00903	90.0	58-113	0.0581	21	WG475655
Di-n-butyl phthalate	mg/l	0.00969	0.00968	97.0	51-131	0.117	22	WG475655
Di-n-octyl phthalate	mg/l	0.0100	0.00985	100.	51-138	1.51	22	WG475655
Dibenz(a,h)anthracene	mg/l	0.00829	0.00859	83.0	39-144	3.55	30	WG475655
Diethyl phthalate	mg/l	0.00872	0.00842	87.0	36-128	3.54	27	WG475655
Dimethyl phthalate	mg/l	0.00696	0.00668	70.0	10-135	4.11	33	WG475655
Fluoranthene	mg/l	0.00916	0.00897	92.0	53-119	2.14	28	WG475655
Fluorene	mg/l	0.00854	0.00845	85.0	49-116	1.05	25	WG475655
Hexachloro-1,3-butadiene	mg/l	0.00781	0.00724	78.0	21-116	7.53	50	WG475655
Hexachlorobenzene	mg/l	0.00794	0.00816	79.0	51-121	2.72	23	WG475655
Hexachlorocyclopentadiene	mg/l	0.00796	0.00727	80.0	4-126	9.09	50	WG475655
Hexachloroethane	mg/l	0.00681	0.00590	68.0	15-109	14.2	50	WG475655
Indeno(1,2,3-cd)pyrene	mg/l	0.00814	0.00833	81.0	40-143	2.36	30	WG475655
Isophorone	mg/l	0.00838	0.00818	84.0	48-126	2.47	31	WG475655
n-Nitrosodi-n-propylamine	mg/l	0.00888	0.00879	89.0	47-122	0.996	33	WG475655
n-Nitrosodimethylamine	mg/l	0.00393	0.00361	39.0	11-69	8.55	50	WG475655
n-Nitrosodiphenylamine	mg/l	0.00735	0.00727	74.0	59-143	1.13	23	WG475655
Naphthalene	mg/l	0.00805	0.00752	80.0	29-103	6.78	45	WG475655
Nitrobenzene	mg/l	0.00785	0.00738	78.0	31-105	6.25	43	WG475655
Pentachlorophenol	mg/l	0.00630	0.00697	63.0	20-122	10.1	50	WG475655
Phenanthrene	mg/l	0.00852	0.00826	85.0	54-112	3.17	22	WG475655
Phenol	mg/l	0.00279	0.00283	28.0	17-52	1.51	33	WG475655
Pyrene	mg/l	0.00908	0.00892	91.0	46-130	1.86	28	WG475655
2,4,6-Tribromophenol				80.55	10-148			WG475655
2-Fluorobiphenyl				81.73	26-122			WG475655
2-Fluorophenol				40.01	10-87			WG475655
Nitrobenzene-d5				79.62	12-120			WG475655
Phenol-d5				27.49	10-67			WG475655
p-Terphenyl-d14				108.1	34-149			WG475655
PCB 1260	mg/l	0.000479	0.000478	96.0	46-126	0.161	34	WG475727
Decachlorobiphenyl				88.10	10-122.6			WG475727
Tetrachloro-m-xylene				57.54	15.3-114.2			WG475727
Sulfate	mg/l	39.1	39.2	98.0	90-110	0.255	20	WG476192
1,1,1,2-Tetrachloroethane	mg/l	0.0225	0.0224	90.0	75-134	0.270	20	WG476864
1,1,1-Trichloroethane	mg/l	0.0219	0.0213	88.0	67-137	2.94	20	WG476864
1,1,2,2-Tetrachloroethane	mg/l	0.0241	0.0239	96.0	72-128	0.670	20	WG476864
1,1,2-Trichloroethane	mg/l	0.0245	0.0251	98.0	79-123	2.47	20	WG476864
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0248	0.0240	99.0	51-149	3.25	20	WG476864

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Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethane	mg/l	0.0241	0.0236	96.0	67-133	2.02	20	WG476864
1,1-Dichloroethene	mg/l	0.0240	0.0228	96.0	60-130	5.09	20	WG476864
1,1-Dichloropropene	mg/l	0.0243	0.0246	97.0	68-132	0.940	20	WG476864
1,2,3-Trichlorobenzene	mg/l	0.0239	0.0236	96.0	63-138	1.46	20	WG476864
1,2,3-Trichloropropane	mg/l	0.0247	0.0236	99.0	68-130	4.59	20	WG476864
1,2,3-Trimethylbenzene	mg/l	0.0242	0.0243	97.0	70-127	0.400	20	WG476864
1,2,4-Trichlorobenzene	mg/l	0.0234	0.0237	93.0	65-137	1.27	20	WG476864
1,2,4-Trimethylbenzene	mg/l	0.0249	0.0248	100.	72-135	0.150	20	WG476864
1,2-Dibromo-3-Chloropropane	mg/l	0.0179	0.0191	71.0	55-134	6.80	20	WG476864
1,2-Dibromoethane	mg/l	0.0247	0.0250	99.0	75-126	1.10	20	WG476864
1,2-Dichlorobenzene	mg/l	0.0248	0.0247	99.0	75-122	0.310	20	WG476864
1,2-Dichloroethane	mg/l	0.0246	0.0244	98.0	63-137	1.02	20	WG476864
1,2-Dichloropropane	mg/l	0.0247	0.0254	99.0	74-122	2.52	20	WG476864
1,3,5-Trimethylbenzene	mg/l	0.0252	0.0252	101.	73-134	0.0500	20	WG476864
1,3-Dichlorobenzene	mg/l	0.0251	0.0249	100.	73-131	1.09	20	WG476864
1,3-Dichloropropane	mg/l	0.0247	0.0251	99.0	77-119	1.47	20	WG476864
1,4-Dichlorobenzene	mg/l	0.0248	0.0250	99.0	70-121	0.760	20	WG476864
2,2-Dichloropropane	mg/l	0.0226	0.0206	90.0	46-151	9.34	20	WG476864
2-Butanone (MEK)	mg/l	0.139	0.131	111.	53-132	5.62	20	WG476864
2-Chlorotoluene	mg/l	0.0247	0.0250	99.0	74-128	1.01	20	WG476864
4-Chlorotoluene	mg/l	0.0250	0.0246	100.	74-130	1.48	20	WG476864
4-Methyl-2-pentanone (MIBK)	mg/l	0.125	0.126	100.	60-142	1.27	20	WG476864
Acetone	mg/l	0.143	0.136	115.	48-134	4.98	20	WG476864
Acrolein	mg/l	0.143	0.123	114.	6-182	14.7	39	WG476864
Acrylonitrile	mg/l	0.132	0.130	106.	60-140	1.98	20	WG476864
Benzene	mg/l	0.0243	0.0242	97.0	67-126	0.430	20	WG476864
Bromobenzene	mg/l	0.0238	0.0238	95.0	76-123	0.0300	20	WG476864
Bromodichloromethane	mg/l	0.0223	0.0223	89.0	68-133	0.0800	20	WG476864
Bromoform	mg/l	0.0136	0.0141	54*	60-139	3.43	20	WG476864
Bromomethane	mg/l	0.0270	0.0173	108.	45-175	44.0*	20	WG476864
Carbon tetrachloride	mg/l	0.0218	0.0215	87.0	64-141	1.16	20	WG476864
Chlorobenzene	mg/l	0.0247	0.0253	99.0	77-125	2.68	20	WG476864
Chlorodibromomethane	mg/l	0.0192	0.0198	77.0	73-138	3.16	20	WG476864
Chloroethane	mg/l	0.0266	0.0257	106.	49-155	3.49	20	WG476864
Chloroform	mg/l	0.0226	0.0226	90.0	66-126	0.150	20	WG476864
Chloromethane	mg/l	0.0207	0.0205	83.0	45-152	1.17	20	WG476864
cis-1,2-Dichloroethene	mg/l	0.0232	0.0230	93.0	72-128	0.570	20	WG476864
cis-1,3-Dichloropropene	mg/l	0.0228	0.0232	91.0	73-131	1.73	20	WG476864
Di-isopropyl ether	mg/l	0.0239	0.0230	95.0	63-139	3.63	20	WG476864
Dibromomethane	mg/l	0.0242	0.0239	97.0	73-125	1.18	20	WG476864
Dichlorodifluoromethane	mg/l	0.0236	0.0227	94.0	39-189	3.84	24	WG476864
Ethylbenzene	mg/l	0.0250	0.0260	100.	76-129	4.21	20	WG476864
Hexachloro-1,3-butadiene	mg/l	0.0219	0.0215	88.0	67-135	1.73	20	WG476864
Isopropylbenzene	mg/l	0.0250	0.0253	100.	73-132	1.04	20	WG476864
Methyl tert-butyl ether	mg/l	0.0229	0.0218	92.0	51-142	4.93	20	WG476864
Methylene Chloride	mg/l	0.0236	0.0222	94.0	64-125	5.98	20	WG476864
n-Butylbenzene	mg/l	0.0240	0.0244	96.0	63-142	1.53	20	WG476864
n-Propylbenzene	mg/l	0.0250	0.0252	100.	71-132	0.920	20	WG476864
Naphthalene	mg/l	0.0247	0.0243	99.0	56-145	1.61	20	WG476864
p-Isopropyltoluene	mg/l	0.0251	0.0255	100.	68-138	1.33	20	WG476864
sec-Butylbenzene	mg/l	0.0254	0.0253	102.	70-135	0.440	20	WG476864
Styrene	mg/l	0.0248	0.0248	99.0	78-130	0.150	20	WG476864
tert-Butylbenzene	mg/l	0.0249	0.0250	100.	72-134	0.140	20	WG476864
Tetrachloroethene	mg/l	0.0253	0.0262	101.	67-135	3.80	20	WG476864
Toluene	mg/l	0.0244	0.0249	98.0	72-122	2.18	20	WG476864
trans-1,2-Dichloroethene	mg/l	0.0227	0.0227	91.0	67-129	0.160	20	WG476864
trans-1,3-Dichloropropene	mg/l	0.0206	0.0209	82.0	66-137	1.58	20	WG476864
Trichloroethene	mg/l	0.0235	0.0245	94.0	74-126	4.44	20	WG476864
Trichlorofluoromethane	mg/l	0.0290	0.0250	116.	54-156	15.0	20	WG476864

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Vinyl chloride	mg/l	0.0305	0.0301	122.	55-153	1.12	20	WG476864
Xylenes, Total	mg/l	0.0762	0.0774	102.	75-128	1.66	20	WG476864
4-Bromofluorobenzene				102.8	75-128			WG476864
Dibromofluoromethane				97.70	79-125			WG476864
Toluene-d8				102.5	87-114			WG476864

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Chloride	mg/l	60.4	10.0	50	101.	80-120	L455991-01	WG475306
Nitrate	mg/l	7.24	2.10	5	103.	80-120	L455991-01	WG475306
Cyanide	mg/l	0.218	0.00510	.2	106.	90-110	L455943-03	WG475230
Mercury	mg/l	0.00296	0	.003	98.7	70-130	L455662-01	WG475375
Nitrate-Nitrite	mg/l	15.8	11.0	1	96.0	80-120	L456035-02	WG475615
Hardness, Total (mg/L as CaCO3)	mg/l	353.	230.	150	82.0	80-120	L455992-01	WG475823
Aluminum	mg/l	1.01	0.0747	1	93.5	75-125	L456001-02	WG475915
Arsenic	mg/l	0.921	0	1	92.1	75-125	L456001-02	WG475915
Barium	mg/l	0.930	0.00904	1	92.1	75-125	L456001-02	WG475915
Boron	mg/l	0.986	0.0417	1	94.4	75-125	L456001-02	WG475915
Cadmium	mg/l	0.924	0.000240	1	92.4	75-125	L456001-02	WG475915
Calcium	mg/l	21.8	11.9	10	99.0	75-125	L456001-02	WG475915
Chromium	mg/l	0.956	0.000600	1	95.5	75-125	L456001-02	WG475915
Cobalt	mg/l	1.01	0.000600	1	101.	75-125	L456001-02	WG475915
Copper	mg/l	0.978	0.000900	1	97.7	75-125	L456001-02	WG475915
Iron	mg/l	2.20	1.30	1	90.0	75-125	L456001-02	WG475915
Lead	mg/l	0.968	0	1	96.8	75-125	L456001-02	WG475915
Magnesium	mg/l	10.8	0.844	10	99.6	75-125	L456001-02	WG475915
Manganese	mg/l	1.04	0.0813	1	95.9	75-125	L456001-02	WG475915
Molybdenum	mg/l	0.975	0.00486	1	97.0	75-125	L456001-02	WG475915
Nickel	mg/l	0.933	0	1	93.3	75-125	L456001-02	WG475915
Selenium	mg/l	0.876	0.00160	1	87.4	75-125	L456001-02	WG475915
Silver	mg/l	0.955	0	1	95.5	75-125	L456001-02	WG475915
Zinc	mg/l	0.902	0	1	90.2	75-125	L456001-02	WG475915
Sulfate	mg/l	108.	60.0	50	96.0	80-120	L456808-04	WG476192
1,1,1,2-Tetrachloroethane	mg/l	2.40	0	.025	95.8	45-152	L456379-15	WG476864
1,1,1-Trichloroethane	mg/l	2.24	0	.025	89.4	31-161	L456379-15	WG476864
1,1,2,2-Tetrachloroethane	mg/l	2.43	0	.025	97.3	49-149	L456379-15	WG476864
1,1,2-Trichloroethane	mg/l	2.62	0	.025	105.	46-145	L456379-15	WG476864
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	2.58	0	.025	103.	14-168	L456379-15	WG476864
1,1-Dichloroethane	mg/l	2.76	0.320	.025	97.7	30-159	L456379-15	WG476864
1,1-Dichloroethene	mg/l	3.95	1.50	.025	97.9	10-162	L456379-15	WG476864
1,1-Dichloropropene	mg/l	2.47	0	.025	98.6	14-162	L456379-15	WG476864
1,2,3-Trichlorobenzene	mg/l	2.28	0	.025	91.1	32-143	L456379-15	WG476864
1,2,3-Trichloropropane	mg/l	2.52	0	.025	101.	48-148	L456379-15	WG476864
1,2,3-Trimethylbenzene	mg/l	2.42	0	.025	96.8	36-141	L456379-15	WG476864

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Tax I.D. 62-0814289

Est. 1970

Chemical Transportation, Inc. - AZ
Kyle Wilcox
1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,2,4-Trichlorobenzene	mg/l	2.25	0	.025	90.0	27-142	L456379-15	WG476864
1,2,4-Trimethylbenzene	mg/l	2.52	0	.025	101.	29-153	L456379-15	WG476864
1,2-Dibromo-3-Chloropropane	mg/l	1.81	0	.025	72.4	37-148	L456379-15	WG476864
1,2-Dibromoethane	mg/l	2.58	0	.025	103.	41-149	L456379-15	WG476864
1,2-Dichlorobenzene	mg/l	2.47	0	.025	98.6	40-139	L456379-15	WG476864
1,2-Dichloroethane	mg/l	2.54	0	.025	101.	29-167	L456379-15	WG476864
1,2-Dichloropropane	mg/l	2.41	0	.025	96.5	39-148	L456379-15	WG476864
1,3,5-Trimethylbenzene	mg/l	2.56	0	.025	102.	33-149	L456379-15	WG476864
1,3-Dichlorobenzene	mg/l	2.56	0	.025	102.	32-148	L456379-15	WG476864
1,3-Dichloropropane	mg/l	2.62	0	.025	105.	44-142	L456379-15	WG476864
1,4-Dichlorobenzene	mg/l	2.51	0	.025	100.	32-136	L456379-15	WG476864
2,2-Dichloropropane	mg/l	2.09	0	.025	83.5	14-158	L456379-15	WG476864
2-Butanone (MEK)	mg/l	13.9	0	.125	111.	32-151	L456379-15	WG476864
2-Chlorotoluene	mg/l	2.61	0	.025	104.	35-147	L456379-15	WG476864
4-Chlorotoluene	mg/l	2.55	0	.025	102.	33-147	L456379-15	WG476864
4-Methyl-2-pentanone (MIBK)	mg/l	12.1	0	.125	96.8	40-160	L456379-15	WG476864
Acetone	mg/l	13.2	0	.125	105.	25-157	L456379-15	WG476864
Acrolein	mg/l	13.0	0	.125	104.	0-179	L456379-15	WG476864
Acrylonitrile	mg/l	13.2	0	.125	105.	37-162	L456379-15	WG476864
Benzene	mg/l	2.50	0	.025	100.	16-158	L456379-15	WG476864
Bromobenzene	mg/l	2.51	0	.025	100.	37-147	L456379-15	WG476864
Bromodichloromethane	mg/l	2.18	0	.025	87.2	45-147	L456379-15	WG476864
Bromoform	mg/l	1.35	0	.025	54.0	38-152	L456379-15	WG476864
Bromomethane	mg/l	2.29	0	.025	91.5	0-191	L456379-15	WG476864
Carbon tetrachloride	mg/l	2.21	0	.025	88.5	22-168	L456379-15	WG476864
Chlorobenzene	mg/l	2.66	0	.025	106.	33-148	L456379-15	WG476864
Chlorodibromomethane	mg/l	2.07	0	.025	82.6	48-151	L456379-15	WG476864
Chloroethane	mg/l	2.61	0	.025	104.	4-176	L456379-15	WG476864
Chloroform	mg/l	2.31	0	.025	92.3	37-147	L456379-15	WG476864
Chloromethane	mg/l	1.93	0	.025	77.3	10-174	L456379-15	WG476864
cis-1,2-Dichloroethene	mg/l	6.04	3.50	.025	102.	29-156	L456379-15	WG476864
cis-1,3-Dichloropropene	mg/l	2.32	0	.025	92.7	35-148	L456379-15	WG476864
Di-isopropyl ether	mg/l	2.38	0	.025	95.3	39-160	L456379-15	WG476864
Dibromomethane	mg/l	2.34	0	.025	93.5	36-152	L456379-15	WG476864
Dichlorodifluoromethane	mg/l	2.43	0	.025	97.2	0-200	L456379-15	WG476864
Ethylbenzene	mg/l	2.68	0	.025	107.	29-150	L456379-15	WG476864
Hexachloro-1,3-butadiene	mg/l	1.98	0	.025	79.2	28-144	L456379-15	WG476864
Isopropylbenzene	mg/l	2.62	0	.025	105.	35-147	L456379-15	WG476864
Methyl tert-butyl ether	mg/l	2.23	0	.025	89.3	24-167	L456379-15	WG476864
Methylene Chloride	mg/l	2.29	0	.025	91.6	23-151	L456379-15	WG476864
n-Butylbenzene	mg/l	2.35	0	.025	94.0	22-151	L456379-15	WG476864
n-Propylbenzene	mg/l	2.61	0	.025	104.	26-150	L456379-15	WG476864
Naphthalene	mg/l	2.34	0	.025	93.6	24-160	L456379-15	WG476864
p-Isopropyltoluene	mg/l	2.54	0	.025	102.	28-151	L456379-15	WG476864
sec-Butylbenzene	mg/l	2.52	0	.025	101.	32-149	L456379-15	WG476864
Styrene	mg/l	2.61	0	.025	104.	38-149	L456379-15	WG476864
tert-Butylbenzene	mg/l	2.56	0	.025	102.	36-149	L456379-15	WG476864
Tetrachloroethene	mg/l	2.82	0	.025	113.	13-157	L456379-15	WG476864
Toluene	mg/l	2.48	0	.025	99.2	22-152	L456379-15	WG476864
trans-1,2-Dichloroethene	mg/l	2.28	0	.025	91.4	11-160	L456379-15	WG476864
trans-1,3-Dichloropropene	mg/l	2.11	0	.025	84.4	33-153	L456379-15	WG476864
Trichloroethene	mg/l	2.91	0.460	.025	97.9	18-163	L456379-15	WG476864
Trichlorofluoromethane	mg/l	2.68	0	.025	107.	10-177	L456379-15	WG476864
Vinyl chloride	mg/l	2.93	0	.025	117.	0-179	L456379-15	WG476864
Xylenes, Total	mg/l	8.04	0	.075	107.	27-151	L456379-15	WG476864
4-Bromofluorobenzene					102.2	75-128		WG476864
Dibromofluoromethane					96.39	79-125		WG476864
Toluene-d8					101.4	87-114		WG476864

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1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Chloride	mg/l	59.2	60.4	98.4	80-120	2.01	20	L455991-01	WG475306
Nitrate	mg/l	7.15	7.24	101.	80-120	1.25	20	L455991-01	WG475306
Cyanide	mg/l	0.215	0.218	105.	90-110	1.39	20	L455943-03	WG475230
Mercury	mg/l	0.00284	0.00296	94.7	70-130	4.14	20	L455662-01	WG475375
Nitrate-Nitrite	mg/l	15.9	15.8	97.0	80-120	0.316	20	L456035-02	WG475615
Hardness, Total (mg/L as CaCO3)	mg/l	347.	353.	78.0*	80-120	1.71	20	L455992-01	WG475823
Aluminum	mg/l	1.05	1.01	97.5	75-125	3.88	20	L456001-02	WG475915
Arsenic	mg/l	0.953	0.921	95.3	75-125	3.42	20	L456001-02	WG475915
Barium	mg/l	0.977	0.930	96.8	75-125	4.93	20	L456001-02	WG475915
Boron	mg/l	1.04	0.986	99.8	75-125	5.33	20	L456001-02	WG475915
Cadmium	mg/l	0.978	0.924	97.8	75-125	5.68	20	L456001-02	WG475915
Calcium	mg/l	22.0	21.8	101.	75-125	0.913	20	L456001-02	WG475915
Chromium	mg/l	0.981	0.956	98.0	75-125	2.58	20	L456001-02	WG475915
Cobalt	mg/l	1.06	1.01	106.	75-125	4.83	20	L456001-02	WG475915
Copper	mg/l	1.02	0.978	102.	75-125	4.20	20	L456001-02	WG475915
Iron	mg/l	2.34	2.20	104.	75-125	6.17	20	L456001-02	WG475915
Lead	mg/l	0.999	0.968	99.9	75-125	3.15	20	L456001-02	WG475915
Magnesium	mg/l	11.4	10.8	106.	75-125	5.41	20	L456001-02	WG475915
Manganese	mg/l	1.06	1.04	97.9	75-125	1.90	20	L456001-02	WG475915
Molybdenum	mg/l	1.00	0.975	99.5	75-125	2.53	20	L456001-02	WG475915
Nickel	mg/l	0.957	0.933	95.7	75-125	2.54	20	L456001-02	WG475915
Selenium	mg/l	0.922	0.876	92.0	75-125	5.12	20	L456001-02	WG475915
Silver	mg/l	0.994	0.955	99.4	75-125	4.00	20	L456001-02	WG475915
Zinc	mg/l	0.944	0.902	94.4	75-125	4.55	20	L456001-02	WG475915
Sulfate	mg/l	105.	108.	90.0	80-120	2.82	20	L456808-04	WG476192
1,1,1,2-Tetrachloroethane	mg/l	2.27	2.40	90.9	45-152	5.29	21	L456379-15	WG476864
1,1,1-Trichloroethane	mg/l	2.17	2.24	86.9	31-161	2.88	23	L456379-15	WG476864
1,1,2,2-Tetrachloroethane	mg/l	2.25	2.43	89.8	49-149	7.96	22	L456379-15	WG476864
1,1,2-Trichloroethane	mg/l	2.49	2.62	99.6	46-145	5.21	20	L456379-15	WG476864
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	2.45	2.58	98.0	14-168	5.16	24	L456379-15	WG476864
1,1-Dichloroethane	mg/l	2.66	2.76	93.8	30-159	3.63	21	L456379-15	WG476864
1,1-Dichloroethene	mg/l	3.87	3.95	94.6	10-162	2.10	23	L456379-15	WG476864
1,1-Dichloropropene	mg/l	2.43	2.47	97.2	14-162	1.43	23	L456379-15	WG476864
1,2,3-Trichlorobenzene	mg/l	2.23	2.28	89.3	32-143	2.03	33	L456379-15	WG476864
1,2,3-Trichloropropane	mg/l	2.23	2.52	89.3	48-148	12.0	23	L456379-15	WG476864
1,2,3-Trimethylbenzene	mg/l	2.43	2.42	97.2	36-141	0.490	25	L456379-15	WG476864
1,2,4-Trichlorobenzene	mg/l	2.27	2.25	90.9	27-142	0.960	30	L456379-15	WG476864
1,2,4-Trimethylbenzene	mg/l	2.39	2.52	95.7	29-153	5.11	27	L456379-15	WG476864
1,2-Dibromo-3-Chloropropane	mg/l	1.56	1.81	62.3	37-148	15.1	27	L456379-15	WG476864
1,2-Dibromoethane	mg/l	2.47	2.58	98.8	41-149	4.41	21	L456379-15	WG476864
1,2-Dichlorobenzene	mg/l	2.48	2.47	99.2	40-139	0.590	23	L456379-15	WG476864
1,2-Dichloroethane	mg/l	2.43	2.54	97.1	29-167	4.40	21	L456379-15	WG476864
1,2-Dichloropropane	mg/l	2.47	2.41	98.8	39-148	2.40	20	L456379-15	WG476864
1,3,5-Trimethylbenzene	mg/l	2.45	2.56	97.9	33-149	4.56	26	L456379-15	WG476864
1,3-Dichlorobenzene	mg/l	2.42	2.56	96.7	32-148	5.53	24	L456379-15	WG476864
1,3-Dichloropropane	mg/l	2.47	2.62	98.6	44-142	6.08	20	L456379-15	WG476864

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1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,4-Dichlorobenzene	mg/l	2.48	2.51	99.4	32-136	0.850	23	L456379-15	WG476864
2,2-Dichloropropane	mg/l	2.06	2.09	82.3	14-158	1.42	23	L456379-15	WG476864
2-Butanone (MEK)	mg/l	12.7	13.9	101.	32-151	9.38	26	L456379-15	WG476864
2-Chlorotoluene	mg/l	2.41	2.61	96.5	35-147	7.88	24	L456379-15	WG476864
4-Chlorotoluene	mg/l	2.42	2.55	96.7	33-147	5.23	25	L456379-15	WG476864
4-Methyl-2-pentanone (MIBK)	mg/l	11.6	12.1	92.7	40-160	4.31	28	L456379-15	WG476864
Acetone	mg/l	12.1	13.2	96.7	25-157	8.64	26	L456379-15	WG476864
Acrolein	mg/l	11.4	13.0	90.9	0-179	13.4	39	L456379-15	WG476864
Acrylonitrile	mg/l	12.0	13.2	96.1	37-162	9.11	24	L456379-15	WG476864
Benzene	mg/l	2.44	2.50	97.4	16-158	2.68	21	L456379-15	WG476864
Bromobenzene	mg/l	2.31	2.51	92.4	37-147	8.25	23	L456379-15	WG476864
Bromodichloromethane	mg/l	2.18	2.18	87.1	45-147	0.130	20	L456379-15	WG476864
Bromoform	mg/l	1.20	1.35	47.9	38-152	12.1	20	L456379-15	WG476864
Bromomethane	mg/l	1.23	2.29	49.3	0-191	60.0*	35	L456379-15	WG476864
Carbon tetrachloride	mg/l	2.10	2.21	84.1	22-168	5.06	24	L456379-15	WG476864
Chlorobenzene	mg/l	2.55	2.66	102.	33-148	4.46	22	L456379-15	WG476864
Chlorodibromomethane	mg/l	1.88	2.07	75.2	48-151	9.47	21	L456379-15	WG476864
Chloroethane	mg/l	2.39	2.61	95.5	4-176	8.99	27	L456379-15	WG476864
Chloroform	mg/l	2.25	2.31	89.9	37-147	2.65	21	L456379-15	WG476864
Chloromethane	mg/l	1.74	1.93	69.6	10-174	10.4	28	L456379-15	WG476864
cis-1,2-Dichloroethene	mg/l	5.82	6.04	92.7	29-156	3.83	22	L456379-15	WG476864
cis-1,3-Dichloropropene	mg/l	2.24	2.32	89.8	35-148	3.23	21	L456379-15	WG476864
Di-isopropyl ether	mg/l	2.33	2.38	93.1	39-160	2.35	21	L456379-15	WG476864
Dibromomethane	mg/l	2.34	2.34	93.5	36-152	0.0900	20	L456379-15	WG476864
Dichlorodifluoromethane	mg/l	2.35	2.43	94.0	0-200	3.33	26	L456379-15	WG476864
Ethylbenzene	mg/l	2.57	2.68	103.	29-150	4.12	24	L456379-15	WG476864
Hexachloro-1,3-butadiene	mg/l	2.02	1.98	81.0	28-144	2.24	33	L456379-15	WG476864
Isopropylbenzene	mg/l	2.44	2.62	97.6	35-147	6.91	25	L456379-15	WG476864
Methyl tert-butyl ether	mg/l	2.09	2.23	83.7	24-167	6.47	22	L456379-15	WG476864
Methylene Chloride	mg/l	2.23	2.29	89.2	23-151	2.67	21	L456379-15	WG476864
n-Butylbenzene	mg/l	2.38	2.35	95.1	22-151	1.18	29	L456379-15	WG476864
n-Propylbenzene	mg/l	2.44	2.61	97.6	26-150	6.91	25	L456379-15	WG476864
Naphthalene	mg/l	2.23	2.34	89.1	24-160	4.86	37	L456379-15	WG476864
p-Isopropyltoluene	mg/l	2.43	2.54	97.1	28-151	4.51	27	L456379-15	WG476864
sec-Butylbenzene	mg/l	2.40	2.52	96.2	32-149	4.70	26	L456379-15	WG476864
Styrene	mg/l	2.49	2.61	99.7	38-149	4.64	23	L456379-15	WG476864
tert-Butylbenzene	mg/l	2.38	2.56	95.2	36-149	7.13	26	L456379-15	WG476864
Tetrachloroethene	mg/l	2.75	2.82	110.	13-157	2.32	24	L456379-15	WG476864
Toluene	mg/l	2.47	2.48	98.8	22-152	0.490	22	L456379-15	WG476864
trans-1,2-Dichloroethene	mg/l	2.25	2.28	90.1	11-160	1.42	23	L456379-15	WG476864
trans-1,3-Dichloropropene	mg/l	2.09	2.11	83.5	33-153	1.01	22	L456379-15	WG476864
Trichloroethene	mg/l	2.82	2.91	94.5	18-163	3.02	21	L456379-15	WG476864
Trichlorofluoromethane	mg/l	2.36	2.68	94.6	10-177	12.5	24	L456379-15	WG476864
Vinyl chloride	mg/l	2.77	2.93	111.	0-179	5.38	26	L456379-15	WG476864
Xylenes, Total	mg/l	7.57	8.04	101.	27-151	6.02	23	L456379-15	WG476864
4-Bromofluorobenzene				96.12	75-128				WG476864
Dibromofluoromethane				93.71	79-125				WG476864
Toluene-d8				102.3	87-114				WG476864

Batch number /Run number / Sample number cross reference

WG475306: R1198308: L455992-01
WG475230: R1199109: L455992-01
WG475486: R1199720: L455992-01
WG475375: R1200130: L455992-01
WG475580: R1200272: L455992-01
WG475615: R1200352: L455992-01
WG475823: R1200364: L455992-01

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Chemical Transportation, Inc. - AZ
Kyle Wilcox
1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

WG475655: R1200948: L455992-01
WG475727: R1201612: L455992-01
WG475915: R1202451: L455992-01
WG476192: R1203610: L455992-01
WG476864: R1206628: L455992-01

* * Calculations are performed prior to rounding of reported values
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Kyle Wilcox
1945 East Jackson Street

Phoenix, AZ 85034

Quality Assurance Report
Level II

L455992

May 06, 2010

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, April 16, 2010

Christine Walters
Envirotech
5796 US Highway 64
Farmington, NM 87401

TEL: (505) 632-0615
FAX (505) 632-1865

RE: Key Energy

Order No.: 1004248

Dear Christine Walters:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/13/2010 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107

CHAIN OF CUSTODY RECORD

8191

Client:	Project Name / Location:
Key Energy Disposal	Land Farm
Client Address: 345 CR 350 Aztec	Sampler Name: Steve Wilson
Client Phone No.: (Disposal) 334-6186 (CELL) 793-6938	Client No.: 98065-0013

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl2	Preservative HCl	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
CELL #1	10/14/09		52113	Soil / Solid / Sludge / Aqueous	1-baggy 1-4oz				✓		✓	✓				✓	✓	3' below Treatment Zone			✓	✓
CELL #2			52114	Soil / Solid / Sludge / Aqueous	1-baggy 1-4oz				✓		✓	✓				✓					✓	✓
Background		1440	52115	Soil / Solid / Sludge / Aqueous	1 500mL												✓				✓	✓
Cell #1			52116	Soil / Solid / Sludge / Aqueous	1 4oz											✓	✓	Treatment Zone (top)			✓	✓
Cell #2			52117	Soil / Solid / Sludge / Aqueous	1 4oz											✓	✓				✓	✓
				Soil / Solid / Sludge / Aqueous																		
				Soil / Solid / Sludge / Aqueous																		
				Soil / Solid / Sludge / Aqueous																		
				Soil / Solid / Sludge / Aqueous																		
				Soil / Solid / Sludge / Aqueous																		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Steve Wilson	10-14-09	3:15 PM	Kendall Agustin	10/14/09	15:15
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

PO# 1424283

envirotech Analytical Laboratory
5796 US Highway 64 • Farmington, 1 • 505-632-0615 • lab@envirotech-inc.com

CHAIN OF CUSTODY RECORD

Client:	Project Name / Location:
[illegible]	Land farm
Client Address:	**Sampler Name:**
[illegible]	Steve Wilson
Client Phone No.:	**Client No.:**
[illegible]	

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
CELL #1	10/14/09			(Soil) Sludge Solid Aqueous	1-baggy 2-4oz																	✓	✓
CELL #2				(Soil) Sludge Solid Aqueous	1-baggy 2-4oz																		
Background		1440		(Soil) Sludge Solid Aqueous	1 30mL																		
Cell #1				Soil Sludge Solid Aqueous																			
Cell #2				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Steve Wilson	10-14-09	3:15 PM	Kendall Angelo	10/14/09	15:10
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

PO# 1424283

envirotech
Analytical Laboratory
5796 US Highway 64 • Farmington, [illegible] • 505-632-0615 • lab@envirotech-inc.com

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-10*

CLIENT:	Envirotech	**Client Sample ID:**	53668-SWD
Lab Order:	1004248	**Collection Date:**	4/12/2010 2:30:00 PM
Project:	Key Energy	**Date Received:**	4/13/2010
Lab ID:	1004248-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Acenaphthylene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Aniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Anthracene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Azobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benz(a)anthracene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(a)pyrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(b)fluoranthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(g,h,i)perylene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzo(k)fluoranthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Benzoic acid	ND	100		µg/L	1	4/14/2010 5:53:58 PM
Benzyl alcohol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-chloroethyl)ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Bis(2-ethylhexyl)phthalate	1300	250		µg/L	5	4/15/2010 3:40:10 PM
4-Bromophenyl phenyl ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Butyl benzyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Carbazole	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Chloro-3-methylphenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Chloroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Chloronaphthalene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Chlorophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Chlorophenyl phenyl ether	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Chrysene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Di-n-butyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Di-n-octyl phthalate	1500	250		µg/L	5	4/15/2010 3:40:10 PM
Dibenz(a,h)anthracene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Dibenzofuran	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,2-Dichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,3-Dichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,4-Dichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
3,3'-Dichlorobenzidine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Diethyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Dimethyl phthalate	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dichlorophenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dimethylphenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dinitrophenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
2,4-Dinitrotoluene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,6-Dinitrotoluene	ND	50		µg/L	1	4/14/2010 5:53:58 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-10*

CLIENT:	Envirotech	**Client Sample ID:**	53668-SWD
Lab Order:	1004248	**Collection Date:**	4/12/2010 2:30:00 PM
Project:	Key Energy	**Date Received:**	4/13/2010
Lab ID:	1004248-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Fluoranthene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Fluorene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachlorobutadiene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachlorocyclopentadiene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Hexachloroethane	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Isophorone	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Methylnaphthalene	290	50		µg/L	1	4/14/2010 5:53:58 PM
2-Methylphenol	94	50		µg/L	1	4/14/2010 5:53:58 PM
3+4-Methylphenol	69	50		µg/L	1	4/14/2010 5:53:58 PM
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
N-Nitrosodimethylamine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
N-Nitrosodiphenylamine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Naphthalene	220	50		µg/L	1	4/14/2010 5:53:58 PM
2-Nitroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
3-Nitroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Nitroaniline	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Nitrobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2-Nitrophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
4-Nitrophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Pentachlorophenol	ND	100		µg/L	1	4/14/2010 5:53:58 PM
Phenanthrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Phenol	95	50		µg/L	1	4/14/2010 5:53:58 PM
Pyrene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Pyridine	ND	50		µg/L	1	4/14/2010 5:53:58 PM
1,2,4-Trichlorobenzene	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,4,5-Trichlorophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
2,4,6-Trichlorophenol	ND	50		µg/L	1	4/14/2010 5:53:58 PM
Surr: 2,4,6-Tribromophenol	74.2	16.6-150		%REC	1	4/14/2010 5:53:58 PM
Surr: 2-Fluorobiphenyl	71.6	19.6-134		%REC	1	4/14/2010 5:53:58 PM
Surr: 2-Fluorophenol	34.1	9.54-113		%REC	1	4/14/2010 5:53:58 PM
Surr: 4-Terphenyl-d14	88.6	22.7-145		%REC	1	4/14/2010 5:53:58 PM
Surr: Nitrobenzene-d5	66.6	14.6-134		%REC	1	4/14/2010 5:53:58 PM
Surr: Phenol-d5	41.5	10.7-80.3		%REC	1	4/14/2010 5:53:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	*Analyte detected below quantitation limits*	MCL	*Maximum Contaminant Level*
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc. Date: *16-Apr-10*

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004248

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: mb-21933		*MBLK*					Batch ID: 21933		Analysis Date: 4/15/2010 3:09:36 PM		
Acenaphthene	ND	µg/L	10								
Acenaphthylene	ND	µg/L	10								
Aniline	ND	µg/L	10								
Anthracene	ND	µg/L	10								
Azobenzene	ND	µg/L	10								
Benz(a)anthracene	ND	µg/L	10								
Benzo(a)pyrene	ND	µg/L	10								
Benzo(b)fluoranthene	ND	µg/L	10								
Benzo(g,h,i)perylene	ND	µg/L	10								
Benzo(k)fluoranthene	ND	µg/L	10								
Benzoic acid	ND	µg/L	20								
Benzyl alcohol	ND	µg/L	10								
Bis(2-chloroethoxy)methane	ND	µg/L	10								
Bis(2-chloroethyl)ether	ND	µg/L	10								
Bis(2-chloroisopropyl)ether	ND	µg/L	10								
(2-ethylhexyl)phthalate	ND	µg/L	10								
3romophenyl phenyl ether	ND	µg/L	10								
Butyl benzyl phthalate	ND	µg/L	10								
Carbazole	ND	µg/L	10								
4-Chloro-3-methylphenol	ND	µg/L	10								
4-Chloroaniline	ND	µg/L	10								
2-Chloronaphthalene	ND	µg/L	10								
2-Chlorophenol	ND	µg/L	10								
4-Chlorophenyl phenyl ether	ND	µg/L	10								
Chrysene	ND	µg/L	10								
Di-n-butyl phthalate	ND	µg/L	10								
Di-n-octyl phthalate	ND	µg/L	10								
Dibenz(a,h)anthracene	ND	µg/L	10								
Dibenzofuran	ND	µg/L	10								
1,2-Dichlorobenzene	ND	µg/L	10								
1,3-Dichlorobenzene	ND	µg/L	10								
1,4-Dichlorobenzene	ND	µg/L	10								
3,3'-Dichlorobenzidine	ND	µg/L	10								
Diethyl phthalate	ND	µg/L	10								
Dimethyl phthalate	ND	µg/L	10								
2,4-Dichlorophenol	ND	µg/L	20								
2,4-Dimethylphenol	ND	µg/L	10								
4,6-Dinitro-2-methylphenol	ND	µg/L	20								
2,4-Dinitrophenol	ND	µg/L	20								
2,4-Dinitrotoluene	ND	µg/L	10								
2,6-Dinitrotoluene	ND	µg/L	10								
Fluoranthene	ND	µg/L	10								
orene	ND	µg/L	10								
xachlorobenzene	ND	µg/L	10								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc. Date: *16-Apr-10*

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004248

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: mb-21933		*MBLK*				Batch ID:	**21933**	Analysis Date:		4/15/2010 3:09:36 PM	
Hexachlorobutadiene	ND	µg/L	10								
Hexachlorocyclopentadiene	ND	µg/L	10								
Hexachloroethane	ND	µg/L	10								
Indeno(1,2,3-cd)pyrene	ND	µg/L	10								
Isophorone	ND	µg/L	10								
2-Methylnaphthalene	ND	µg/L	10								
2-Methylphenol	ND	µg/L	10								
3+4-Methylphenol	ND	µg/L	10								
N-Nitrosodi-n-propylamine	ND	µg/L	10								
N-Nitrosodimethylamine	ND	µg/L	10								
N-Nitrosodiphenylamine	ND	µg/L	10								
Naphthalene	ND	µg/L	10								
2-Nitroaniline	ND	µg/L	10								
3-Nitroaniline	ND	µg/L	10								
4-Nitroaniline	ND	µg/L	10								
Nitrobenzene	ND	µg/L	10								
2-Nitrophenol	ND	µg/L	10								
4-Nitrophenol	ND	µg/L	10								
Pentachlorophenol	ND	µg/L	20								
Phenanthrene	ND	µg/L	10								
Phenol	ND	µg/L	10								
Pyrene	ND	µg/L	10								
Pyridine	ND	µg/L	10								
1,2,4-Trichlorobenzene	ND	µg/L	10								
2,4,5-Trichlorophenol	ND	µg/L	10								
2,4,6-Trichlorophenol	ND	µg/L	10								
Sample ID: lcs-21933		*LCS*				Batch ID:	**21933**	Analysis Date:		4/14/2010 2:51:29 PM	
Acenaphthene	78.54	µg/L	10	100	0	78.5	33.2	88.1			
4-Chloro-3-methylphenol	139.7	µg/L	10	200	0	69.9	26.5	101			
2-Chlorophenol	131.5	µg/L	10	200	0	65.8	27.5	88.7			
1,4-Dichlorobenzene	65.76	µg/L	10	100	0	65.8	27.2	74.1			
2,4-Dinitrotoluene	80.48	µg/L	10	100	0	80.5	32.6	107			
N-Nitrosodi-n-propylamine	65.90	µg/L	10	100	0	65.9	27.1	96.3			
4-Nitrophenol	96.68	µg/L	10	200	0	48.3	6.78	74.7			
Pentachlorophenol	156.8	µg/L	20	200	0	78.4	14.8	113			
Phenol	72.32	µg/L	10	200	0	36.2	17	53.4			
Pyrene	70.36	µg/L	10	100	0	70.4	27	96.3			
1,2,4-Trichlorobenzene	64.76	µg/L	10	100	0	64.8	30	77.9			
Sample ID: lcsd-21933		*LCSD*				Batch ID:	**21933**	Analysis Date:		4/14/2010 3:21:44 PM	
Acenaphthene	79.58	µg/L	10	100	0	79.6	33.2	88.1	1.32	30.5	
4-Chloro-3-methylphenol	149.9	µg/L	10	200	0	74.9	26.5	101	7.00	28.6	
2-Chlorophenol	137.1	µg/L	10	200	0	68.6	27.5	88.7	4.17	107	
1,4-Dichlorobenzene	56.12	µg/L	10	100	0	56.1	27.2	74.1	15.8	62.1	
2,4-Dinitrotoluene	83.52	µg/L	10	100	0	83.5	32.6	107	3.71	14.7	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 16-Apr-10

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy

Work Order: 1004248

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: lcsd-21933		*LCSD*				Batch ID:	**21933**	Analysis Date:		4/14/2010 3:21:44 PM	
N-Nitrosodi-n-propylamine	63.66	µg/L	10	100	0	63.7	27.1	96.3	3.46	30.3	
4-Nitrophenol	96.12	µg/L	10	200	0	48.1	6.78	74.7	0.581	36.3	
Pentachlorophenol	157.2	µg/L	20	200	0	78.6	14.8	113	0.255	49	
Phenol	71.74	µg/L	10	200	0	35.9	17	53.4	0.805	52.4	
Pyrene	73.54	µg/L	10	100	0	73.5	27	96.3	4.42	16.3	
1,2,4-Trichlorobenzene	66.52	µg/L	10	100	0	66.5	30	77.9	2.68	36.4	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ENVIROTECH

Date Received: 4/13/2010

Work Order Number 1004248

Received by: TLS

Sample ID labels checked by: TS (Initials)

Checklist completed by: _____ (Signature) 4/13/10 (Date)

Matrix:

Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**6.6°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Envirotech

Address: 5796 US HWY 64
Farmington, NM 87401

Phone #: 505 632-0615

email ~~or Fax#~~: cwalters@envirotech-inc.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Key Energy

Project #: 98065-0013

Project Manager: Christine Walters

Sampler: Neil Allen

On Ice: ☒ Yes ☐ No

Sample Temperature: [illegible]

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1004248	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)						Air Bubbles (Y or N)
4/12/10	1430	53668-SWD	2-1 Liter Ambers	COOL	1											X						

Date:	Time:	Relinquished by:	Received by:	Remarks:
4/12/10	1715	[signature]	[signature] 4/13/10 1208	PO # 14848
Date:	Time:	Relinquished by:	Received by:	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, April 22, 2010

Christine Walters
Envirotech
5796 US Highway 64
Farmington, NM 87401

TEL: (505) 632-0615
FAX (505) 632-1865

RE: Key Energy

Order No.: 1004278

Dear Christine Walters:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/14/2010 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Apr-10*

CLIENT:	Envirotech	**Client Sample ID:**	53668-SWD
Lab Order:	1004278	**Collection Date:**	4/12/2010 2:30:00 PM
Project:	Key Energy	**Date Received:**	4/14/2010
Lab ID:	1004278-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 200.8: METALS						Analyst: **TES**
Arsenic	0.0039	0.0025		mg/L	2.5	4/20/2010 2:49:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Apr-10*

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy

Work Order: 1004278

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 200.8: Metals											
Sample ID: MB-21976		*MBLK*				Batch ID:	**21976**	Analysis Date:	4/20/2010 2:26:04 PM		
Arsenic	ND	mg/L	0.0025								
Sample ID: LLLCS-21976		*LCS*				Batch ID:	**21976**	Analysis Date:	4/20/2010 2:31:38 PM		
Arsenic	0.05223	mg/L	0.0025	0.05	0	104	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ENVIROTECH

Date Received: 4/14/2010

Work Order Number 1004278

Received by: ARS

Sample ID labels checked by: [illegible] Initials

Checklist completed by: [illegible] Signature 4-14-10 Date

Matrix: Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3.6°	<6° C Acceptable If given sufficient time to cool.		

Number of preserved bottles checked for pH: [illegible]

<2 >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Enviratech

Address: 5796 US Hwy 64
Farmington, NM 87401

Phone #: (505-632-0615

email or Fax#: cwalters@enviratech

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Key Energy

Project #: 98065-0013

Project Manager: Christine Walters

Sampler: Neil Allen

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1004278	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	X Arsenic (7060) ~~Total~~	~~Total~~ ICPMS	201.8 ICPMS		Air Bubbles (Y or N)
4/12/10	14:30	53668-SWD	Plastic 125mL	HNO_3	-1												X				

Date:	Time:	Relinquished by:	Received by:	Date:	Time:	Relinquished by:	Received by:
4/13/10	16:30	Neil Thompson	9:20 4/14/10				

Remarks:
~~*Arsenic analysis using atomic absorption (EPA method 7060)~~
Deviation EPA METHOD 6020 ICP-MS
PO# 14861 Spoke with client

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

4-14-10

CHAIN OF CUSTODY RECORD

09069

lient: Key Energy	Project Name / Location: Sunco SWD #1
lient Address:	Sampler Name: Neil Allen
lient Phone No.: 486-2010	Client No.: 98065-0013

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl2	Preservative HCl	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA ~~8~~ 6 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	8270	Hg	As	Sample Cool	Sample Intact
SWD	4/12/10	14:30	53668	Soil Sludge Solid [✓ Aqueous]	7 1L ambers 1 500L 2 Vials 1 125 1 250						X	X	X	X					X	X	X	Y	Y
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

elinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/12/10	2:55		4/12/10	14:55
elinquished by: (Signature)			Received by: (Signature)		
elinquished by: (Signature)			Received by: (Signature)		

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

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1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2002

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC

2. Originating Site:
Enterprise Cathodic Protection Well CPS 1989

3. Location of Material (Street Address, City, State or ULSTR):

Section 13, Township 29N and Range 10W San Juan County, New Mexico

4. Source and Description of Waste:
Low pH groundwater being produced from Artesian well at the CPS 1989. Origin of low pH water is unknown at this time. Currently, water is being neutralized with soda ash for disposal based on the approval from the NMOCD.

Estimated Volume 120 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, David R. Smith, _____, representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Daily

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☒ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
Rock Springs Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Disposal Systems Well # 1 UIC-CLI-005

Address of Facility: 345 CR 350 Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Steve Wilson TITLE: _____ DATE: 09-30-09

SIGNATURE: Steve Wilson TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent

envirotech
Analytical Laboratory

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Tank	Date Reported:	09-28-09
Laboratory Number:	51851	Date Sampled:	09-28-09
Chain of Custody:	8070	Date Received:	09-28-09
Sample Matrix:	Aqueous	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	09-28-09
Condition:	Intact		

Parameter	Analytical Result	Units
pH	**8.58**	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **CPS 1989.**

Analyst

Review

CHAIN OF CUSTODY RECORD

8070

Client: Enterprize	Project Name / Location: CPS 1989	ANALYSIS / PARAMETERS
Client Address:	Sampler Name: JKirchner	
Client Phone No.:	Client No.: 97057-0222	

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl2	Preservative HCl		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	PH			Sample Cool	Sample Intact
TANK	9-28-9	1030	5185/	Soil Sludge Solid [✓ Aqueous]	1														✓			✓	✓
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																	RUSH		
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	9-28-9	1115		9/28/09	1115
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

envirotech
Analytical Laboratory

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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC

2. **Originating Site:**
Enterprise Cathodic Protection Well CPS 1989

3. **Location of Material (Street Address, City, State or ULSTR):**

Section 13, Township 29N and Range 10W San Juan County, New Mexico

4. **Source and Description of Waste:**
Low pH groundwater being produced from Artesian well at the CPS 1989. Origin of low pH water is unknown at this time. Currently, water is being neutralized with soda ash for disposal based on the approval from the NMOCD.

Estimated Volume 120 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, David R. Smith David R S, representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☒ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Rock Springs Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Disposal Systems Well # 1 UIC-CLI-005

Address of Facility: 345 CR 350 Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Steve Wilson TITLE: _____ DATE: 10-19-09

SIGNATURE: Steve Wilson TELEPHONE NO.: 334-6186

Surface Waste Management Facility Authorized Agent

envirotech
Analytical Laboratory

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Enterprise	Date Reported:	10-19-09
Laboratory Number:	52150	Date Sampled:	10-16-09
Chain of Custody:	8220	Date Received:	10-16-09
Sample Matrix:	Aqueous	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	10-16-09
Condition:	Intact		

Parameter	Analytical Result	Units
pH	**6.89**	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **CPS 1989.**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

8220

Client: Enterprise
Project Name / Location: EPS 1989
Client Address:
Sampler Name: Rene' Garcia
Client Phone No.:
Client No.: 97057-0222

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	ph			Sample Cool	Sample Intact
						$HgCl_2$	HCl	Cool															
Enterprise	10/16/09	11:05	52150	Soil Sludge Solid [✓ Aqueous]	poly			X											X			X	X
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	10/16/09	12:30		10/16/09	12:30
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
El Paso Natural Gas Company - Headquarters: 2 North Nevada Blvd, Colorado Springs, CO 80903,
Regional Division Office: 8725 Alameda Park Dr. NE, Albuquerque, NM 87113
Local Office: El Paso Natural Gas, PO Box 127, Bloomfield, NM 87413

2. **Originating Site: EPNG's – Line 1202 - @ Rio Vista Compressor Station – ¼-mile south of County Road (Sullivan) 4990, and ½-mile east of US 550.**

3. **Location of Material (Street Address, City, State or ULSTR):** SW/4 NE/4 Sec 27, T-29-N, R-11-W, San Juan County, NM
Lat: 36 degrees, 41'50" and Long: 107 degrees, 58'35.5"

4. **Source and Description of Waste: Hydrostatic test water from EPNG's pipeline 1202 south of Bloomfield. The water is of relatively good quality in general as the pipeline was cleaner prior to introducing the water. Approximately 41 frac-tanks or 700,000 gallons. Analytical is attached to this form.**

Estimated Volume 16,700 b yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 16,700 yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Richard Duarte, [signature] representative or authorized agent for El Paso Natural Gas Company do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Richard Duarte [signature], representative for El Paso Natural Gas Company do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: M & R Trucking Inc., 281 County Road 350, Farmington, NM (505) 334-5541**

OCD Permitted Waste Management Facility

Name and Facility Permit #: Key Energy Services

Address of Facility: 5651 US Highway 64, Farmington, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☒ **Injection** ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Neil Allen TITLE: Truck Supervisor DATE: 11-23-09

SIGNATURE: [signature] TELEPHONE NO.: 505-334-6186
Waste Management Facility Authorized Agent

2.75 Per BBL.

elpaso

LABORATORY SERVICE REPORT

REQUESTOR:	Pyeatt, Russell S. [Russ] Bloomfield,, NM (505) 632-6001	**REPORT DATE:** **REQUEST NO:** **APPROVED BY:**	10/29/2009 2009101224 Campbell, Darrell

DEPARTMENT: Albuquerque Division
DISTRIBUTION: Duarte, Richard; Mc Knight, Randall K [Randy]; Sanders, Davis D. (Don); Thompson, Robert B. (Robbie)
PERFORMED BY: Columbia Analytical Services

Request Description: Hydrostatic Testing @ Rio Vista, Line 1202
42 Frac Tanks
Date Received: 10/14/2009
Date Completed: 10/29/2009

Sample No: 1 Sampled By: Lorenzo Hernandez Sample Date: 10/13/2009 1:45:00 PM
Received Vol.: Received Date: 10/14/2009
Description: Hydrostatic Test Dewater - Ln. 1202 - M.P. 0 to 6+2348
Analysis: WP New Mexico Hydrotest
Purpose: Disposal/Environmental Concerns
Matrix: Water
Location: EPNG - Albuquerque - San Juan - 01202 - 6+2348 - Hydrostatic Test - Dewater

Data: See attached sheet(s).

Comments:

Sample:	1
Total Metals	
Aluminum (mg/l)	< 0.10
Arsenic (mg/l)	< 0.010
Barium (mg/l)	0.12
Boron (mg/l)	< 0.10
Cadmium (mg/l)	< 0.0030
Calcium (mg/l)	49
Chromium (mg/l)	< 0.010
Cobalt (mg/l)	< 0.010
Copper (mg/l)	< 0.010
Iron (mg/l)	10
Lead (mg/l)	< 0.010
Magnesium (mg/l)	8.9
Molybdenum (mg/l)	< 0.010
Manganese (mg/l)	0.45
Mercury (mg/l)	0.01
Nickel (mg/l)	< 0.010
Selenium (mg/l)	< 0.025
Silver (mg/l)	< 0.0050
Uranium (mg/l)	< 0.0005

Request: 2009101224

Sample:	**1**
Zinc (mg/l)	< 0.050
Anions	
Chloride (mg/l)	28
Fluoride (mg/l)	< 0.50
Nitrite, as N (mg/l)	< 0.020
Nitrate, as N (mg/l)	< 0.10
Nitrate/Nitrite (as N) (mg/l)	< 0.10
Sulfate (mg/l)	86
General Analyses	
pH	7.2
Temperature °C.	18.3
Specific Conductivity (µS/cm)	480
Hardness, Ca/Mg (As CaCO3) (mg/l)	160
Volatile Organic Compounds	
Acetone (µg/l)	< 20
Benzene (µg/l)	14
Bromobenzene (µg/l)	< 1.5
Bromochloromethane (µg/l)	< 0.50
Bromodichloromethane (µg/l)	0.74
Bromoform (µg/l)	< 1.0
Bromomethane (µg/l)	< 5.0
2-Butanone (µg/l)	< 5.0
n-Butylbenzene (µg/l)	< 2.5
sec-Butylbenzene (µg/l)	< 1.5
tert-Butylbenzene (µg/l)	< 2.5
Carbon disulfide (µg/l)	< 0.50
Carbon tetrachloride (µg/l)	< 0.50
Chlorobenzene (µg/l)	< 0.50
Chloroethane (µg/l)	< 4.0
Chloroform (µg/l)	13
Chloromethane (µg/l)	< 5.0
2-Chlorotoluene (µg/l)	< 1.5
4-Chlorotoluene (µg/l)	< 2.0
Dibromochloromethane (µg/l)	< 0.50
1,2-Dibromo-3-chloropropane (µg/l)	< 2.0
1,2-Dibromoethane (µg/l)	< 0.50
Dibromomethane (µg/l)	< 0.50
1,2-Dichlorobenzene (µg/l)	< 1.5
1,3-Dichlorobenzene (µg/l)	< 1.5
1,4-Dichlorobenzene (µg/l)	< 1.5
Dichlorodifluoromethane (µg/l)	< 2.0
1,1-Dichloroethane (µg/l)	< 1.0
1,2-Dichloroethane (µg/l)	< 1.0
1,1-Dichloroethene (µg/l)	< 0.50
cis-1,2-Dichloroethene (µg/l)	< 0.50
trans-1,2-Dichloroethene (µg/l)	< 0.50
1,2-Dichloropropane (µg/l)	< 0.50
1,3-Dichloropropane (µg/l)	< 1.0
2,2-Dichloropropane (µg/l)	< 0.50

Request: 2009101224

Sample:	**1**
1,1-Dichloropropene (µg/l)	< 1.0
cis-1,3-Dichloropropene (µg/l)	< 1.0
trans-1,3-Dichloropropene (µg/l)	< 0.50
Ethylbenzene (µg/l)	< 2.0
Hexachlorobutadiene (µg/l)	< 5.0
2-Hexanone (µg/l)	< 5.0
Iodomethane (µg/l)	< 2.0
Isopropylbenzene (µg/l)	< 2.5
4-Isopropyltoluene (µg/l)	< 1.5
Methylene chloride (µg/l)	< 3.0
4-Methyl-2-pentanone (µg/l)	< 5.0
Methyl tert-butyl ether (µg/l)	< 2.0
Naphthalene (µg/l)	< 5.0
n-Propylbenzene (µg/l)	< 2.0
Styrene (µg/l)	< 1.0
1,1,1,2-Tetrachloroethane (µg/l)	< 0.50
1,1,2,2-Tetrachloroethane (µg/l)	< 0.50
Tetrachloroethene (µg/l)	< 0.50
Toluene (µg/l)	14
1,2,3-Trichlorobenzene (µg/l)	< 5.0
1,2,4-Trichlorobenzene (µg/l)	< 5.0
1,1,1-Trichloroethane (µg/l)	< 0.50
1,1,2-Trichloroethane (µg/l)	< 0.50
Trichloroethene (µg/l)	< 0.50
Trichlorofluoromethane (µg/l)	< 2.0
1,2,3-Trichloropropane (µg/l)	< 1.0
1,2,4-Trimethylbenzene (µg/l)	< 2.0
1,3,5-Trimethylbenzene (µg/l)	< 1.5
Vinyl Acetate (µg/l)	< 5.0
Vinyl chloride (µg/l)	< 0.50
Xylenes, Total (µg/l)	7.5
Trihalomethanes, Total (µg/l)	13.74
Semi Volatiles Organic Compounds	
Acenaphthene (µg/l)	< 20
Acenaphthylene (µg/l)	< 20
Anthracene (µg/l)	< 20
Azobenzene (µg/l)	< 20
Benz(a)anthracene (µg/l)	< 20
Benzo(b)fluoranthene (µg/l)	< 20
Benzo(k)fluoranthene (µg/l)	< 20
Benzoic acid (µg/l)	< 100
Benzyl alcohol (µg/l)	< 20
Benzo(g,h,i)perylene (µg/l)	< 20
Benzo(a)pyrene (µg/l)	< 20
Bis(2-chloroethoxy)methane (µg/l)	< 20
Bis(2-chloroethyl)ether (µg/l)	< 20
Bis(2-chloroisopropyl)ether (µg/l)	< 20
Bis(2-ethylhexyl)phthalate (µg/l)	< 20
4-Bromophenyl phenyl ether (µg/l)	< 20
Butyl benzyl phthalate (µg/l)	< 20
4-Chloro-3-methylphenol (µg/l)	< 20

Request: 2009101224

Sample:	1
4-Chloroaniline (µg/l)	< 40
2-Chloronaphthalene (µg/l)	< 20
2-Chlorophenol (µg/l)	< 20
4-Chlorophenyl phenyl ether (µg/l)	< 20
Chrysene (µg/l)	< 20
Dibenz(a,h)anthracene (µg/l)	< 20
Dibenzofuran (µg/l)	< 20
Di-n-butyl phthalate (µg/l)	< 20
1,2-Dichlorobenzene (µg/l)	< 20
1,3-Dichlorobenzene (µg/l)	< 20
1,4-Dichlorobenzene (µg/l)	< 20
2,4-Dichlorophenol (µg/l)	< 20
3,3'-Dichlorobenzidine (µg/l)	< 20
Diethyl phthalate (µg/l)	< 20
2,4-Dimethylphenol (µg/l)	< 20
Dimethyl phthalate (µg/l)	< 20
4,6-Dinitro-2-methylphenol (µg/l)	< 20
2,4-Dinitrotoluene (µg/l)	< 20
2,6-Dinitrotoluene (µg/l)	< 20
2,4-Dinitrophenol (µg/l)	< 40
Di-n-octyl phthalate (µg/l)	< 20
Fluoranthene (µg/l)	< 20
Fluorene (µg/l)	< 20
Hexachlorobenzene (µg/l)	< 20
Hexachlorobutadiene (µg/l)	< 20
Hexachlorocyclopentadiene (µg/l)	< 20
Hexachloroethane (µg/l)	< 20
Indeno(1,2,3-cd)pyrene (µg/l)	< 20
Isophorone (µg/l)	< 20
Naphthalene (µg/l)	< 20
Nitrobenzene (µg/l)	< 20
2-Methylphenol (µg/l)	< 20
4-Methylphenol (µg/l)	< 20
2-Nitrophenol (µg/l)	< 20
4-Nitrophenol (µg/l)	< 20
N-Nitrosodi-n-propylamine (µg/l)	< 20
N-Nitrosodiphenylamine (µg/l)	< 20
Pentachlorophenol (µg/l)	< 20
Phenol (µg/l)	< 20
Phenanthrene (µg/l)	< 20
Pyrene (µg/l)	< 20
1,2,4-Trichlorobenzene (µg/l)	< 20
2,4,6-Trichlorophenol (µg/l)	< 20
2-Methylnaphthalene (µg/l)	< 20
Radiochemical Activity	
Radium 226 (pCi/L)	<0.6
Radium 228 (pCi/L)	<0.5
Total Radium (pCi/L)	<0.6

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th. St.
Farmington, New Mexico 87499

2. Originating Site:
San Juan 28-7 #190G (hCOP)
API #3003927255
Billing Information: /T110/702015/HZF1/YAZZIE WAN.FIN.8001.46 – Michael Cain

3. Location of Material (Street Address, City, State or ULSTR):
A, 27, T28N, R7W
Rio Riaba County

4. Source and Description of Waste:
"Non hazardous wash water generated from cleaning well site chemical injection storage tanks and tank secondary containments. Water consists of 2-5% residual chemical and 95-98% fresh water"
Estimated Volume 10 yd^3 Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Greg Wurtz, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Services do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter: J & J

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **JFJ Landfarm c/o Industrial Ecosystems, Inc. / NM 01-0010B.**

Address of Facility : **# 49 CR 3150 Aztec, NM 87410**

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Neal Allen TITLE: Administrative Officer DATE: _____

SIGNATURE: Neal Allen TELEPHONE NO.: 505 486-2010
Surface Waste Management Facility Authorized Agent

Chemical Tank Project Request

Reference #: 1380

Request Date: 12/3/2009

API Number	Well Name	Operator	FF Area	Route	SEC	TWN	RNG	Latitude	Longitude	County	Stat
3004529845	EL PASO 1B	BR	22	258	20	029N	009W	36.71215	-107.80844	SAN JUAN	NM

Vendor J.J. 12/4

Assigned: 12/3/2009

Completed: 12-04

Order #

Network # AM02297140

Project Notes

MOVE CHEMICAL INJECTOR FROM SEPERATOR TO WELL HEAD

This chemical injector ~~is~~ is a 55 gallon poly drum with a Rock to hold down the car. The williams pneumatic pump is inoperable and the diaphram is leaking gas to the atmosphere. The regulator is not isolated. The check value is not isolated ~~Warning~~ We disconeted the tubing from them and put in plugs These should be scedulled to be removed. ~~Well must b~~ Shut down.

New Tank Set: ☑

Tank Install Priority: 4

Install Priority Desc: New Ops Request

# of Tanks Orderered:

New Tank Serial #:

Existing Chemical:

Tank Set Notes

A used but clean Sun Pumper poly system is insta on well head at batch treatment site on casing. This system should be scheduled for upgrade to Stainl Steel.

Move inject to Wellhead

Remove Existing Tank: ☑

Tank Removal Notes

Old tank removed to go to Farfaya

Pump Hooked up: ☑

Pump Serial #:

~~**Pump Hookup Notes**~~

This location has no signs ei Hard hat, steel toes, Flam no smoking, H_2S, or location identification.

The compressor suction & discharg are hooked up with rubber hoses.

Chemical Transfer: ☑

Chemical Transfer Notes

50 gallons of H_2S Scavenger was transfered to new system. Rate set at 3 qts @ day. Rate was written on Nalco

Chemical Tank Project Request

Reference #: 1260

Request Date: 9/21/2009

API Number	Well Name	Operator	FF Area	Route	SEC	TWN	RNG	Latitude	Longitude	County	State
3004527312	ALLEN COM 250	BR	3	307	16	031N	009W	36.90124	-107.78077	SAN JUAN	NM

Vendor J.S. 9/25

Assigned: 9/21/2009

Completed: 10-14-09

Order #

Network # AM02315290

Project Notes

PER MSO, REMOVE FOAMER TANK NOT BEING USED

New Tank Set: ☐

Tank Install Priority: 12

Install Priority Desc: Remove Equipment

# of Tanks Orderered:

New Tank Serial #:

Existing Chemical:

Tank Set Notes

No Reset

Remove Existing Tank: ☐

Tank Removal Notes

Pump Hooked up: ☐

Pump Serial #:

Pump Hookup Notes

Chemical Transfer: ☐

Chemical Transfer Notes

Chemical Tank Project Request

Reference #: 1237

Request Date: 9/21/2009

API Number	Well Name	Operator	FF Area	Route	SEC	TWN	RNG	Latitude	Longitude	County	State
3004527517	SAN JUAN 32-9 UNIT 104	BR	3	309	24	032N	010W	36.97301	-107.83096	SAN JUAN	NM

Vendor

Assigned: 9/21/2009

Completed: 10-15-09

Order #

Network # AM02320313

Project Notes

PER MSO, REMOVE FOAMER TANK, NOT BEING USED.

New Tank Set: ☐

Tank Install Priority: 12

Install Priority Desc: Remove Equipment

# of Tanks Orderered:

New Tank Serial #:

Existing Chemical:

Tank Set Notes

No Reset

Remove Existing Tank: ☐

Tank Removal Notes

Pump Hooked up: ☐

Pump Serial #:

Pump Hookup Notes

Chemical Transfer: ☐

Chemical Transfer Notes

District I
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Mid-America Pipline LLC
614 Reilly Ave
Farmington, NM 87401

2. Originating Site:
Kutz Truck Loading

3. Location of Material (Street Address, City, State or ULSTR):
Sec 34 / T 29N / R 11 W San Juan County, NM

4. Source and Description of Waste:
Hydrotest water

Estimated Volume 400 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Don Fernald, representative or authorized agent for Mid America Pipeline LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy / NM-01-0009

Address of Facility: Crouch Mesa Faiclity / 345 CR 350 / Farmington, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: RAY RUPP TITLE: SUPERVISOR DATE: 2/1/2008

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186

Surface Waste Management Facility Authorized Agent

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Enterprise	Project #:	97057-203
Sample ID:	Processed Tank	Date Reported:	01-31-08
Laboratory Number:	44135	Date Sampled:	01-25-08
Chain of Custody:	3839	Date Received:	01-25-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-31-08
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Benzene	**ND**	**0.0001**	**0.5**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	**100.0%**
	1,4-difluorobenzene	**100.0%**
	4-bromochlorobenzene	**100.0%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Kutz.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-31-TCV QA/QC	Date Reported:	01-31-08
Laboratory Number:	44135	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-31-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Benzene	**0.0001**	**ND**	**ND**	**ND**	**ND**	**0.0%**

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Benzene	**0.1000**	**ND**	**0.0998**	**99.8%**	**39-150**

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: **QA/QC for Sample 44135.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

CHAIN OF CUSTODY RECORD

3839

Client: Enterprise

Project Name / Location: Kutz

Client Address: copy: Josh
e-mail Dan Fenaid

Sampler Name: J Kirchner

Client Phone No.:

Client No.: 97057-203

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HCl	Preservative HNO3		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	VOIS TCLP ~~with H/P~~	PAH	TPH (418.1)					Sample Cool	Sample Intact
Processed TANK	1-25	1430	44135	Water				Cool							Benzene only							✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Joshua M Kirchner	1-25	1430	Christine M Walters	1/25/08	1430
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, New Mexico 87401 • (505) 632-0615

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised June 10, 2003

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ Verbal Approval Received: Yes ☒ No ☐	4. Generator Transwestern Pipeline, LLC 5. Originating Site San Juan Lateral Loop A MP 5.4
2. Management Facility Destination Key Energy Disposal	6. Transporter Dawn Trucking
3. Address of Facility Operator #345 CR 350, Aztec, NM 87410	8. State NM
7. Location of Material (Street Address or ULSTR) San Juan Lateral MP 5.4 @ CR 5500	Bloomfield, NM

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Approximately 35,000 barrels of water used for hydrostatic testing 8.9 miles of new 36" diameter natural gas pipeline construction. Water for hydrostatic testing is is being pumped from Dugan's Ditch (aka Citizens Ditch). Water in Dugan's Ditch is diverted from the San Juan River approximately 20 miles upstream of the uptake location.

Estimated Volume 34,500 BBLS. cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE Ray Rupp TITLE: Supervisor DATE: 3-26-08
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Ray Rupp TELEPHONE NO. 505-334-6186

E-MAIL ADDRESS rrupp@keyenergy.com

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

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Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC / c/o Environmental Dept. P.O. Box 4324 Houston, Texas 77210-4324

2. Originating Site:
Largo Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
Sec 15/T26N/R7W San Juan County, NM

4. Source and Description of Waste:
Non-Exempt (it may be exempt/unknown) water from excavation from historic spill remediation.

Estimated Volume 200 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 750 yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Don Fernald, representative or authorized agent for Enterprise Field Services LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
SSS Transports

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy / NM-01-0009

Address of Facility: Crouch Mesa Faiclity / 345 CR 350 / Farmington, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ ~~APPROVED~~ ☐ ~~DENIED (Must Be Maintained As Permanent Record)~~

PRINT NAME: Neil Allen TITLE: Disposal operator DATE: 7/20/2009

SIGNATURE: Neil Allen TELEPHONE NO.:

Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, July 15, 2009

Tami Ross
Souder, Miller and Associates
612 E Murray Dr.
Farmington, NM 87401

TEL: (505) 325-5667
FAX (505) 327-1496

RE: EPCO Valve Box

Order No.: 0907040

Dear Tami Ross:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 7/2/2009 for the analyses presented in the following report.

This report is an addendum to the report dated July 9, 2009. TCLP RCRA 8 Metals have been added.

No determination of compounds below these (denoted by the ND or < sign) has been made. Please don't hesitate to contact Hall Environmental for any additional information or clarifications.

Reporting limits are determined by EPA methodology.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

July 09, 2009

ESC Sample # : L410842-01

Date Received : July 07, 2009
Description :

Site ID :

Sample ID : STOCKPILE

Project # : 0907040

Collected By :
Collection Date : 07/01/09 15:01

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	0.25	0.020	mg/kg	7471	07/09/09	1
Arsenic	1.4	1.0	mg/kg	6010B	07/08/09	1
Barium	250	0.25	mg/kg	6010B	07/08/09	1
Cadmium	BDL	0.25	mg/kg	6010B	07/08/09	1
Chromium	5.0	0.50	mg/kg	6010B	07/08/09	1
Lead	5.3	0.25	mg/kg	6010B	07/08/09	1
Selenium	4.1	1.0	mg/kg	6010B	07/08/09	1
Silver	BDL	0.50	mg/kg	6010B	07/08/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 07/09/09 15:00 Printed: 07/09/09 15:00

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

July 15,2009

ESC Sample # : L412008-01

Date Received : July 07, 2009
Description :

Site ID :

Sample ID : STOCKPILE

Project : 0907040

Collected By :
Collection Date : 07/01/09 15:01

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	07/14/09 1000	AJN	1
Mercury	BDL	0.0010	mg/l	0.20	7470A	07/15/09 0909	ARF	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	07/15/09 0310	ST	1
Barium	0.58	0.15	mg/l	100	6010B	07/15/09 0310	ST	1
Cadmium	BDL	0.050	mg/l	1.0	6010B	07/15/09 0310	ST	1
Chromium	BDL	0.050	mg/l	5.0	6010B	07/15/09 0310	ST	1
Lead	BDL	0.050	mg/l	5.0	6010B	07/15/09 0310	ST	1
Selenium	BDL	0.050	mg/l	1.0	6010B	07/15/09 0310	ST	1
Silver	BDL	0.050	mg/l	5.0	6010B	07/15/09 0310	ST	1

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)
Limit - Maximum Contaminant Level as established by the US EPA
Note:
The reported analytical results relate only to the sample submitted.

Reported: 07/15/09 12:33 Printed: 07/15/09 12:34

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L412008-01	WG431350	SAMP	Silver	R818132	J3J6

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L412008

July 15, 2009

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]03:03
Barium	< .15	mg/l			WG431350	07/15/09 03:03
Cadmium	< .05	mg/l			WG431350	07/15/09 03:03
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]03:03
Lead	< .05	mg/l			WG431350	07/15/09 03:03
Selenium	< .05	mg/l			WG431350	07/15/09 03:03
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]03:03
Mercury	< .0002	mg/l			WG431348	07/15/09 09:04

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Barium	mg/l	0.583	0.580	0.516	20	L412008-01	WG431350
Cadmium	mg/l	0.00	0.00	0.00	20	L412008-01	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Lead	mg/l	0.00	0.00	0.00	20	L412008-01	WG431350
Selenium	mg/l	0.00	0.00	0.00	20	L412008-01	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Mercury	mg/l	0.00	0.00	0.00	20	L412008-01	WG431348

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Barium	mg/l	1.13	1.14	101.	85-115	WG431350
Cadmium	mg/l	1.13	1.15	102.	85-115	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Lead	mg/l	1.13	1.13	100.	85-115	WG431350
Selenium	mg/l	1.13	1.13	100.	85-115	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Mercury	mg/l	.003	0.00317	106.	85-115	WG431348

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Barium	mg/l	1.76	0.580	1.13	104.	75-125	L412008-01	WG431350
Cadmium	mg/l	1.20	0.00	1.13	106.	75-125	L412008-01	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Lead	mg/l	1.16	0.00	1.13	103.	75-125	L412008-01	WG431350
Selenium	mg/l	1.18	0.00	1.13	104.	75-125	L412008-01	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Mercury	mg/l	0.00310	0.00	.003	103.	70-130	L412008-01	WG431348

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Arsenic	mg/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	L412008-01	WG431350
Barium	mg/l	1.68	1.76	97.3	75-125	4.65	20	L412008-01	WG431350
Cadmium	mg/l	1.12	1.20	99.1	75-125	6.90	20	L412008-01	WG431350

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Hall Environmental Analysis Laboratory
Anne Thorne
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Albuquerque, NM 87109

Quality Assurance Report
Level II

L412008

July 15, 2009

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Lead	mg/l	1.10	1.16	97.3	75-125	5.31	20	L412008-01	WG431350
Selenium	mg/l	1.13	1.18	100.	75-125	4.33	20	L412008-01	WG431350
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1350
Mercury	mg/l	0.0030	0.0031	102.	70-130	1.30	20	L412008-01	WG431348

Batch number /Run number / Sample number cross reference

WG431115: R817386: L412008-01
WG431350: R818132: L412008-01
WG431348: R818747: L412008-01

* * Calculations are performed prior to rounding of reported values .
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name SMA-FARM | Date Received: 7/2/2009

Work Order Number 0907040 | Received by: TLS

Sample ID labels checked by: TJ (Initials)

Checklist completed by: 18 (Signature) 7/2/09 (Date)

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
- VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
- Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	<2 >12 unless noted below.
Container/Temp Blank temperature?	4.0°	<6° C Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: SMA

Mailing Address: 612 E Murray DR
Farmington NM 87401

Phone #: 505 325 5667

email or Fax#: tami.ross@souderminer.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush _____

Project Name: EPCO Valve Box

Project #:

Project Manager: Tami Ross

Sampler:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type		BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
7/1/09	1501	SOIL	STOCKPILE	4oz/1	—	-1							✓									

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/1/09	1644	Tami Ross		7/2/09	830
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
BILL TO EPCO
Add TCLP RCRA 8. 4/7/12 Added

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
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Form C-138
Revised March 12, 2004

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC

2. Originating Site:
Enterprise Cathodic Protection Well CPS 1989

3. Location of Material (Street Address, City, State or ULSTR):

Section 13, Township 29N and Range 10W San Juan County, New Mexico

4. Source and Description of Waste:
Low pH groundwater being produced from Artesian well at the CPS 1989. Origin of low pH water is unknown at this time. Currently, water is being neutralized with soda ash for disposal based on the approval from the NMOCD.

Estimated Volume 45 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, David R. Smith, representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Certifying Waste Is Generated Yearly ☐ Monthly ☐ Weekly ☐ Per Load

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☒ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, [signature], representative for Enterprise Field Services, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
Rock Springs Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Disposal Systems Well # 1 UIC-CLI-005

Address of Facility: 345 CR 350 Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Steve Wilson TITLE: ? DATE: 07-08-09

SIGNATURE: Steve Wilson TELEPHONE NO.: 334-6186

Surface Waste Management Facility Authorized Agent

envirotech
Analytical Laboratory

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	TK	Date Reported:	07-06-09
Laboratory Number:	50779	Date Sampled:	07-02-09
Chain of Custody:	7391	Date Received:	07-02-09
Sample Matrix:	Aqueous	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-02-09
Condition:	Intact		

Parameter	Analytical Result	Units
pH	8.38	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: CPS 1989.

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Tr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

7391

Client: Enterprize	Project Name / Location: CPS 1989	ANALYSIS / PARAMETERS
Client Address:	Sampler Name: J Kirchner	
Client Phone No.:	Client No.: 97057-0222	

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE		Pb		Sample Cool	Sample Intact
						HgCl2	HCl																
TK	7-2-9	1100	50779	Soil Solid Sludge [✓ Aqueous]	1-125 ml plastic															X		✓	✓
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
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				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	7-2-9	1215	Christin M Walte	7/2/09	1215
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

envirotech
Analytical Laboratory
5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

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HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: SODA ASH

Revision Date: 02-Jan-2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: SODA ASH
Synonyms: None
Chemical Family: Carbonate
Application: Buffer

Manufacturer/Supplier
Halliburton Energy Services
P.O. Box 1431
Duncan, Oklahoma 73536-0431
Emergency Telephone: (281) 575-5000

Prepared By
Chemical Compliance
Telephone: 1-580-251-4335

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Sodium carbonate	497-19-8	60 - 100%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation.

4. FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin Wash with soap and water. Get medical attention if irritation persists.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media	Water fog, carbon dioxide, foam, dry chemical.
Special Exposure Hazards	Decomposition in fire may produce toxic gases.
Special Protective Equipment for Fire-Fighters	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.
NFPA Ratings:	Health 2, Flammability 0, Reactivity 0
HMIS Ratings:	Flammability 0, Reactivity 0, Health 2

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures	Use appropriate protective equipment. Avoid creating and breathing dust.
Environmental Precautionary Measures	Prevent from entering sewers, waterways, or low areas.
Procedure for Cleaning / Absorption	Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions	Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust.
Storage Information	Store away from acids. Store in a cool, dry location. Product has a shelf life of 36 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use in a well ventilated area. Localized ventilation should be used to control dust levels.
Respiratory Protection	Dust/mist respirator. (95%)
Hand Protection	Normal work gloves.
Skin Protection	Normal work coveralls.
Eye Protection	Dust proof goggles.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Color:	White
Odor:	Odorless
pH:	11.5
Specific Gravity @ 20 C (Water=1):	2.5

9. PHYSICAL AND CHEMICAL PROPERTIES

Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	48- 62
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	105.99

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong acids.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation.
Skin Contact	Prolonged or repeated contact may cause skin irritation.
Eye Contact	May cause eye irritation.
Ingestion	Irritation of the mouth, throat, and stomach.
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.

Toxicity Tests

Oral Toxicity:	LD50: 4220 mg/kg (Rat)
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined

Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not applicable
Bio-accumulation	Not Determined

Ecotoxicological Information

Acute Fish Toxicity:	TLM24: 385 mg/l (Lepomis macrochirus)
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT
Not restricted

Canadian TDG
Not restricted

ADR Not restricted

Air Transportation

ICAO/IATA Not restricted

Sea Transportation

IMDG Not restricted

Other Shipping Information

Labels: None

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS
Not applicable

Additional Information	For additional information on the use of this product, contact your local Halliburton representative. For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.
Disclaimer Statement	This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

END OF MSDS

envirotech memo/fax

to: H.C. Puttman

company: Key Energy

fax #: 505-566-5389

re: CPS 1989

date: April 6, 2009

pages: 21 (including cover page)

project:

cc:

comments...

Please contact Greg Crabtree at (505) 947-9510 to let him know if this is okay to haul. Thank you!

from the desk of... Jenilee Duncan (505) 632-0615

envirotech inc.
5796 us highway 64
farmington, n. m. 87401
505.632.0615
505.632.1865 fax

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC

2. **Originating Site:**
Enterprise Cathodic Protection Well CPS 1989

3. **Location of Material (Street Address, City, State or ULSTR):**

Section 13, Township 29N and Range 10W San Juan County, New Mexico

4. **Source and Description of Waste:**
Low pH groundwater being produced from Artesian well at the CPS 1989. Origin of low pH water is unknown at this time. Currently, water is being neutralized with soda ash for disposal based on the approval from the NMOCD.

Estimated Volume 50 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, David R. Smith, representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. [redacted]

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☒ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, David R. Smith, representative for Enterprise Field Svs. LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Rock Springs Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Disposal Systems Well # 1 UIC-CLI-005

Address of Facility: 345 CR 350 Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Neil Allen TITLE: Disposal operator DATE: 3/29/10

SIGNATURE: Neil Allen TELEPHONE NO.: 486-2010

Surface Waste Management Facility Authorized Agent

envirotech
Analytical Laboratory

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Tank	Date Reported:	03-27-09
Laboratory Number:	49501	Date Sampled:	03-27-09
Chain of Custody:	6569	Date Received:	03-27-09
Sample Matrix:	Aqueous	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	03-27-09
Condition:	Intact		

Parameter	Analytical Result	Units
pH	5.66	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **CPS 1989.**

Analyst

Review

CHAIN OF CUSTODY RECORD

6569

Client: Enter Prize	Project Name / Location: CPS 1989	ANALYSIS / PARAMETERS
Client Address:	Sampler Name: JKirchner	
Client Phone No.:	Client No.: 97057 0222	

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	Pb			Sample Cool	Sample Intact
TANK	3-27	1045	49501	Soil Sludge Solid [✓ Aqueous]				Cool											X			✓	✓
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
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				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3-27-9	1200	Monica	5.27.05	1200
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Hose	Date Reported:	06-10-08
Chain of Custody:	4522	Date Sampled:	06-03-08
Laboratory Number:	45743	Date Received:	06-03-08
Sample Matrix:	Liquid	Date Analyzed:	06-05-08
Preservative:		Analysis Requested:	8260 VOC
Condition:	Intact		

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client: Enterprise
Sample ID: Hose
Laboratory Number: 45743

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	3.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	91.7	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	102	% Recovery	74.6-123	1
Toluene-d8	88.9	% Recovery	84.2-115	1
4-Bromofluorobenzene	84.9	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **Drums.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	06-10-08
Laboratory Number:	06-05 VOA	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-05-08
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Laboratory Blank
Laboratory Number: 06-05 VOA

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	1.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	102	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	99.2	% Recovery	74.6-123	1
Toluene-d8	115	% Recovery	84.2-115	1
4-Bromofluorobenzene	113	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 45643 - 45647 and 45743.**

Analyst

Review

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Daily Calibration Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Daily Calibration	Date Reported:	06-10-08
Laboratory Number:	06-06 QA/QC	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-05-08
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
Benzene	100	106	106	80 - 120
Toluene	100	100	100	80 - 120
Ethylbenzene	100	101	101	80 - 120
Xylenes, Total	100	105	105	80 - 120
Methyl tert-butyl ether (MTBE)	100	97.5	97.5	80 - 120
1,2,4-Trimethylbenzene	100	101	101	80 - 120
1,3,5-Trimethylbenzene	100	110	110	80 - 120
1,2-Dichloroethane (EDC)	100	1096	1096	80 - 120
1,2-Dibromoethane (EDB)	100	115	115	80 - 120
Naphthalene	100	98.5	98.5	80 - 120
1-Methylnaphthalene	100	88.5	88.5	80 - 120
2-Methylnaphthalene	100	99.3	99.3	80 - 120
Bromobenzene	100	101	101	80 - 120
Bromochloromethane	100	105	105	80 - 120
Bromodichloromethane	100	118	118	80 - 120
Bromoform	100	101	101	80 - 120
Bromomethane	100	95.6	95.6	80 - 120
Carbon Tetrachloride	100	103	103	80 - 120
Chlorobenzene	100	101	101	80 - 120
Chloroethane	100	97.6	97.6	80 - 120
Chloroform	100	102	102	80 - 120
Chloromethane	100	96.4	96.4	80 - 120
2-Chlorotoluene	100	101	101	80 - 120
4-Chlorotoluene	100	118	118	80 - 120
cis-1,2-Dichloroethene	100	114	114	80 - 120
cis-1,3-Dichloropropene	100	110	110	80 - 120
1,2-Dibromo-3-chloropropane	100	95.6	95.6	80 - 120
Dibromochloromethane	100	104	104	80 - 120
Dibromoethane	100	110	110	80 - 120
1,2-Dichlorobenzene	100	98.4	98.4	80 - 120
1,3-Dichlorobenzene	100	110	110	80 - 120
1,4-Dichlorobenzene	100	109	109	80 - 120
Dichlorodifluoromethane	100	118	118	80 - 120
1,1-Dichloroethane	100	101	101	80 - 120
1,1-Dichloroethene	100	95.6	95.6	80 - 120
1,2-Dichloropropane	100	98.4	98.4	80 - 120
1,3-Dichloropropane	100	102	102	80 - 120
2,2-Dichloropropane	100	110	110	80 - 120

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Daily Calibration
Laboratory Number: 06-06 QA/QC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
1,1-Dichloropropene	100	107	107	80 - 120
Hexachlorobutadiene	100	87.9	87.9	80 - 120
Isopropylbenzene	100	110	110	80 - 120
4-Isopropyltoluene	100	101	101	80 - 120
Methylene Chloride	100	108	108	80 - 120
n-Butylbenzene	100	109	109	80 - 120
n-Propylbenzene	100	101	101	80 - 120
sec-Butylbenzene	100	100	100	80 - 120
Styrene	100	107	107	80 - 120
tert-Butylbenzene	100	101	101	80 - 120
Tetrachloroethene (PCE)	100	89.9	89.9	80 - 120
1,1,1,2-Tetrachloroethane	100	103	103	80 - 120
1,1,2,2-Tetrachloroethane	100	116	116	80 - 120
trans-1,2-Dichloroethene	100	94.5	94.5	80 - 120
trans-1,3-Dichloropropene	100	110	110	80 - 120
Trichloroethene (TCE)	100	108	108	80 - 120
Trichlorofluoromethane	100	97.8	97.8	80 - 120
1,2,3-Trichlorobenzene	100	99.4	99.4	80 - 120
1,2,4-Trichlorobenzene	100	97.4	97.4	80 - 120
1,1,1-Trichloroethane	100	110	110	80 - 120
1,1,2-Trichloroethane	100	99.4	99.4	80 - 120
1,2,3-Trichloropropane	100	101	101	80 - 120
Vinyl Chloride	100	99.5	99.5	80 - 120

Surrogates:			Rec. Limits
Dibromofluoromethane	98.9	% Recovery	78.6-115
1,2-Dichloroethane-d4	101	% Recovery	74.6-123
Toluene-d8	103	% Recovery	84.2-115
4-Bromofluorobenzene	103	% Recovery	78.6-115

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 45643 - 45647 and 45743.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Hose	Date Reported:	06-10-08
Laboratory Number:	45743	Date Sampled:	06-03-08
Chain of Custody:	4522	Date Received:	06-03-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:		Date Analyzed:	06-09-08
Condition:	Intact		

Parameter	Analytical Result	Units
pH	**2.29**	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Drums.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

CHAIN OF CUSTODY RECORD

4522

Client: Enterprise

Project Name / Location: [redacted] Drums

Client Address:

Sampler Name: R Kibler

Client Phone No.:

Client No.: 97057-0222

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative H_2SO_4	Preservative HNO_3		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	~~RCRA 8 Metals~~	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	pH				Sample Cool	Sample Intact
Hose	6-3-08		45743	liquid	2						X							X					✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rob Kibler	6-3-08	11:33	Kendall Angstin	6/3/08	1133
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Drums	Date Reported:	06-12-08
Laboratory Number:	45798	Date Sampled:	06-06-08
Chain of Custody:	4545	Date Received:	06-06-08
Sample Matrix:	Liquid	Date Analyzed:	06-09-08
Preservative:	Cool	Date Digested:	06-09-08
Condition:	Intact	Analysis Needed:	Total RCRA Metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	TCLP Regulatory Level (mg/L)
Arsenic	**ND**	**0.001**	**5.0**
Barium	**0.099**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.003**	**0.001**	**5.0**
Lead	**ND**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.185**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Drums.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS
Quality Control /
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-09-TM QA/QC	Date Reported:	06-12-08
Laboratory Number:	45798	Date Sampled:	N/A
Sample Matrix:	Liquid	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	06-09-08
Condition:	Intact	Date Digested:	06-09-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	0.099	0.099	0.0%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%
Lead	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.185	0.186	0.8%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.250	ND	0.252	101%	80% - 120%
Barium	0.500	0.099	0.58	97.3%	80% - 120%
Cadmium	0.250	ND	0.258	103%	80% - 120%
Chromium	0.500	0.003	0.504	100.2%	80% - 120%
Lead	0.500	ND	0.501	100.2%	80% - 120%
Mercury	0.100	ND	0.091	91.0%	80% - 120%
Selenium	0.100	0.185	0.290	102%	80% - 120%
Silver	0.100	ND	0.098	97.6%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 45798.**

Analyst

Review

CHAIN OF CUSTODY RECORD

4545

Client: Enterprise

Project Name / Location: Drums

Client Address:

Sampler Name: R Kibler

Client Phone No.:

Client No.: 97057-0222

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative H_2SO_4	Preservative HNO_3		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)					Sample Cool	Sample Intact
Drums	6-6-08		45798	liquid								X										✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rob Kie	6-6-08	15:41	Kendall Augustine	6/6/08	1541
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: **SODA ASH**

Revision Date: 02-Jan-2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: SODA ASH
Synonyms: None
Chemical Family: Carbonate
Application: Buffer

Manufacturer/Supplier Halliburton Energy Services
P.O. Box 1431
Duncan, Oklahoma 73536-0431
Emergency Telephone: (281) 575-5000

Prepared By Chemical Compliance
Telephone: 1-580-251-4335

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Sodium carbonate	497-19-8	60 - 100%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation.

4. FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin Wash with soap and water. Get medical attention if irritation persists.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits In Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media	Water fog, carbon dioxide, foam, dry chemical.
Special Exposure Hazards	Decomposition in fire may produce toxic gases.
Special Protective Equipment for Fire-Fighters	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.
NFPA Ratings:	Health 2, Flammability 0, Reactivity 0
HMIS Ratings:	Flammability 0, Reactivity 0, Health 2

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures	Use appropriate protective equipment. Avoid creating and breathing dust.
Environmental Precautionary Measures	Prevent from entering sewers, waterways, or low areas.
Procedure for Cleaning / Absorption	Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions	Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust.
Storage Information	Store away from acids. Store in a cool, dry location. Product has a shelf life of 36 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use in a well ventilated area. Localized ventilation should be used to control dust levels.
Respiratory Protection	Dust/mist respirator. (95%)
Hand Protection	Normal work gloves.
Skin Protection	Normal work coveralls.
Eye Protection	Dust proof goggles.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Color:	White
Odor:	Odorless
pH:	11.5
Specific Gravity @ 20 C (Water=1):	2.5

9. PHYSICAL AND CHEMICAL PROPERTIES

Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	48- 62
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	105.99

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong acids.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation.
Skin Contact	Prolonged or repeated contact may cause skin irritation.
Eye Contact	May cause eye irritation.
Ingestion	Irritation of the mouth, throat, and stomach.
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.

Toxicity Tests

Oral Toxicity:	LD50: 4220 mg/kg (Rat)
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined

Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not applicable
Bio-accumulation	Not Determined

Ecotoxicological Information

Acute Fish Toxicity:	TLM24: 385 mg/l (Lepomis macrochirus)
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT
Not restricted

Canadian TDG
Not restricted

ADR Not restricted

Air Transportation

ICAO/IATA Not restricted

Sea Transportation

IMDG Not restricted

Other Shipping Information

Labels:	None

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS
Not applicable

Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

*****END OF MSDS*****

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, March 12, 2008

Ross Kennemer
Animas Environmental Services
624 East Comanche
Farmington, NM 87401

TEL: (505) 564-2281
FAX (505) 324-2022

RE: San Juan Lateral Loop A

Order No.: 0803010

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 3/4/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0803010	**Collection Date:**	3/3/2008 8:45:00 AM
Project:	San Juan Lateral Loop A	**Date Received:**	3/4/2008
Lab ID:	0803010-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JAT
1,2-Dibromoethane	ND	0.010		µg/L	1	3/6/2008 7:15:35 PM
Surr: 1,2,3-Trichloropropane	80.8	54.9-135		%REC	1	3/6/2008 7:15:35 PM
EPA METHOD 8082: PCB'S						Analyst: JMP
Aroclor 1016	ND	1.0		µg/L	1	3/10/2008 5:32:46 PM
Aroclor 1221	ND	5.0		µg/L	1	3/10/2008 5:32:46 PM
Aroclor 1232	ND	1.0		µg/L	1	3/10/2008 5:32:46 PM
Aroclor 1242	ND	1.0		µg/L	1	3/10/2008 5:32:46 PM
Aroclor 1248	ND	1.0		µg/L	1	3/10/2008 5:32:46 PM
Aroclor 1254	ND	1.0		µg/L	1	3/10/2008 5:32:46 PM
Aroclor 1260	ND	1.0		µg/L	1	3/10/2008 5:32:46 PM
Surr: Decachlorobiphenyl	70.0	23.9-124		%REC	1	3/10/2008 5:32:46 PM
Surr: Tetrachloro-m-xylene	74.4	28.1-139		%REC	1	3/10/2008 5:32:46 PM
EPA METHOD 8310: PAHS						Analyst: DMF
Naphthalene	ND	2.0		µg/L	1	3/8/2008 9:22:42 AM
1-Methylnaphthalene	ND	2.0		µg/L	1	3/8/2008 9:22:42 AM
2-Methylnaphthalene	ND	2.0		µg/L	1	3/8/2008 9:22:42 AM
Acenaphthylene	ND	2.5		µg/L	1	3/8/2008 9:22:42 AM
Acenaphthene	ND	5.0		µg/L	1	3/8/2008 9:22:42 AM
Fluorene	ND	0.80		µg/L	1	3/8/2008 9:22:42 AM
Phenanthrene	ND	0.60		µg/L	1	3/8/2008 9:22:42 AM
Anthracene	ND	0.60		µg/L	1	3/8/2008 9:22:42 AM
Fluoranthene	ND	0.30		µg/L	1	3/8/2008 9:22:42 AM
Pyrene	ND	0.30		µg/L	1	3/8/2008 9:22:42 AM
Benz(a)anthracene	ND	0.070		µg/L	1	3/8/2008 9:22:42 AM
Chrysene	ND	0.20		µg/L	1	3/8/2008 9:22:42 AM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	3/8/2008 9:22:42 AM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	3/8/2008 9:22:42 AM
Benzo(a)pyrene	ND	0.070		µg/L	1	3/8/2008 9:22:42 AM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	3/8/2008 9:22:42 AM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	3/8/2008 9:22:42 AM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	3/8/2008 9:22:42 AM
Surr: Benzo(e)pyrene	56.1	59.9-133	S	%REC	1	3/8/2008 9:22:42 AM
EPA METHOD 300.0: ANIONS						Analyst: SLB
Fluoride	0.17	0.10		mg/L	1	3/4/2008 10:51:37 AM
Chloride	8.8	0.10		mg/L	1	3/4/2008 10:51:37 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	3/4/2008 11:26:27 AM
Sulfate	58	0.50		mg/L	1	3/4/2008 10:51:37 AM
EPA METHOD 7470: MERCURY						Analyst: TES

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0803010	**Collection Date:**	3/3/2008 8:45:00 AM
Project:	San Juan Lateral Loop A	**Date Received:**	3/4/2008
Lab ID:	0803010-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: TES
Mercury	ND	0.00020		mg/L	1	3/4/2008 7:58:12 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: TES
Aluminum	ND	0.020		mg/L	1	3/11/2008 12:21:12 PM
Barium	0.052	0.020		mg/L	1	3/11/2008 12:21:12 PM
Boron	ND	0.040		mg/L	1	3/11/2008 12:21:12 PM
Cadmium	ND	0.0020		mg/L	1	3/11/2008 12:21:12 PM
Chromium	ND	0.0060		mg/L	1	3/11/2008 12:21:12 PM
Cobalt	ND	0.0050		mg/L	1	3/11/2008 12:21:12 PM
Copper	ND	0.0060		mg/L	1	3/11/2008 12:21:12 PM
Iron	0.034	0.020		mg/L	1	3/11/2008 12:21:12 PM
Lead	ND	0.0050		mg/L	1	3/11/2008 12:21:12 PM
Manganese	0.29	0.0020		mg/L	1	3/11/2008 12:21:12 PM
Molybdenum	ND	0.0060		mg/L	1	3/11/2008 12:21:12 PM
Nickel	ND	0.010		mg/L	1	3/11/2008 12:21:12 PM
Silver	ND	0.0050		mg/L	1	3/11/2008 12:21:12 PM
Zinc	0.056	0.050		mg/L	1	3/11/2008 12:21:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Benzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Toluene	10	1.0		µg/L	1	3/4/2008 12:50:56 PM
Ethylbenzene	1.3	1.0		µg/L	1	3/4/2008 12:50:56 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Naphthalene	ND	2.0		µg/L	1	3/4/2008 12:50:56 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2008 12:50:56 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2008 12:50:56 PM
Acetone	ND	10		µg/L	1	3/4/2008 12:50:56 PM
Bromobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Bromodichloromethane	6.0	1.0		µg/L	1	3/4/2008 12:50:56 PM
Bromoform	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Bromomethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
2-Butanone	ND	10		µg/L	1	3/4/2008 12:50:56 PM
Carbon disulfide	ND	10		µg/L	1	3/4/2008 12:50:56 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Chlorobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Chloroethane	ND	2.0		µg/L	1	3/4/2008 12:50:56 PM
Chloroform	32	1.0		µg/L	1	3/4/2008 12:50:56 PM
Chloromethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0803010	**Collection Date:**	3/3/2008 8:45:00 AM
Project:	San Juan Lateral Loop A	**Date Received:**	3/4/2008
Lab ID:	0803010-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2008 12:50:56 PM
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Dibromomethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2008 12:50:56 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
2-Hexanone	ND	10		µg/L	1	3/4/2008 12:50:56 PM
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2008 12:50:56 PM
Methylene Chloride	9.1	3.0		µg/L	1	3/5/2008 12:32:31 PM
n-Butylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Styrene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2008 12:50:56 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2008 12:50:56 PM
Vinyl chloride	ND	1.0		µg/L	1	3/4/2008 12:50:56 PM
Xylenes, Total	10	1.5		µg/L	1	3/4/2008 12:50:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0803010	**Collection Date:**	3/3/2008 8:45:00 AM
Project:	San Juan Lateral Loop A	**Date Received:**	3/4/2008
Lab ID:	0803010-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Surr: 1,2-Dichloroethane-d4	103	68.1-123		%REC	1	3/4/2008 12:50:56 PM
Surr: 4-Bromofluorobenzene	103	53.2-145		%REC	1	3/4/2008 12:50:56 PM
Surr: Dibromofluoromethane	101	68.5-119		%REC	1	3/4/2008 12:50:56 PM
Surr: Toluene-d8	109	84-131		%REC	1	3/4/2008 12:50:56 PM
EPA METHOD 9067: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	3.6	2.5		µg/L	1	3/5/2008
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: SMP
Specific Conductance	290	0.010		µmhos/cm	1	3/4/2008
SM4500-H+B: PH						Analyst: SMP
pH	7.40	0.1		pH units	1	3/4/2008
SM 2540C: TDS						Analyst: TAF
Total Dissolved Solids	160	20		mg/L	1	3/5/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-08*

CLIENT: Animas Environmental Services
Lab Order: 0803010
Project: San Juan Lateral Loop A
Lab ID: 0803010-02

Client Sample ID: Trip Blank
Collection Date:
Date Received: 3/4/2008
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JAT
1,2-Dibromoethane	ND	0.010		µg/L	1	3/6/2008 7:27:20 PM
Surr: 1,2,3-Trichloropropane	97.3	64.9-135		%REC	1	3/6/2008 7:27:20 PM
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Benzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Toluene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Ethylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Naphthalene	ND	2.0		µg/L	1	3/4/2008 1:20:26 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2008 1:20:26 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2008 1:20:26 PM
Acetone	ND	10		µg/L	1	3/4/2008 1:20:26 PM
Bromobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Bromodichloromethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Bromoform	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Bromomethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
2-Butanone	ND	10		µg/L	1	3/4/2008 1:20:26 PM
Carbon disulfide	ND	10		µg/L	1	3/4/2008 1:20:26 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Chlorobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Chloroethane	ND	2.0		µg/L	1	3/4/2008 1:20:26 PM
Chloroform	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Chloromethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2008 1:20:26 PM
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Dibromomethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Trip Blank
Lab Order:	0803010	**Collection Date:**	
Project:	San Juan Lateral Loop A	**Date Received:**	3/4/2008
Lab ID:	0803010-02	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BMP
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2008 1:20:26 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
2-Hexanone	ND	10		µg/L	1	3/4/2008 1:20:26 PM
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2008 1:20:26 PM
Methylene Chloride	ND	3.0		µg/L	1	3/4/2008 1:20:26 PM
n-Butylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Styrene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2008 1:20:26 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2008 1:20:26 PM
Vinyl chloride	ND	1.0		µg/L	1	3/4/2008 1:20:26 PM
Xylenes, Total	ND	1.5		µg/L	1	3/4/2008 1:20:26 PM
Surr: 1,2-Dichloroethane-d4	102	68.1-123		%REC	1	3/4/2008 1:20:26 PM
Surr: 4-Bromofluorobenzene	87.4	53.2-145		%REC	1	3/4/2008 1:20:26 PM
Surr: Dibromofluoromethane	100	68.5-119		%REC	1	3/4/2008 1:20:26 PM
Surr: Toluene-d8	107	64-131		%REC	1	3/4/2008 1:20:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

ENERGY LABORATORIES, INC. * 2393 Salt Creek Hwy (82601) * PO Box 3258 * Casper, WY 82602
Toll Free 888.235.0515 * 307.235.0515 * FAX 307.234.1639 * casper@energylab.com * www.energylab.com

LABORATORY ANALYTICAL REPORT

		Revised Date:	03/12/08
Client:	Hall Environmental	Report Date:	03/11/08
Project:	0803010	Collection Date:	03/03/08 08:45
Lab ID:	C08030135-001	DateReceived:	03/05/08
Client Sample ID	Hydrostatic Test Water	Matrix:	Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
NON-METALS							
Cyanide, Total	ND	mg/L		0.0050		Kelada mod	03/08/08 12:12 / ali-b
METALS - DISSOLVED							
Arsenic	ND	mg/L		0.001		SW6020	03/07/08 22:36 / aml
Selenium	ND	mg/L		0.001		SW6020	03/07/08 22:36 / aml
Uranium	0.0003	mg/L		0.0003		SW6020	03/07/08 22:36 / aml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0803010

Report Date: 03/11/08
Work Order: C08030135

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R67838
Sample ID: LRB	Method Blank				Run: ICPMS1-C_080307A				03/07/08 14:21
Arsenic	ND	mg/L	0.0002						
Selenium	0.0004	mg/L	0.0004						
Titanium	ND	mg/L	0.0002						
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS1-C_080307A				03/07/08 14:29
Arsenic	0.0541	mg/L	0.0010	108	85	115			
Selenium	0.0535	mg/L	0.0010	106	85	115			
Titanium	0.0528	mg/L	0.0010	106	85	115			
Sample ID: C08021079-001DMS4	Post Digestion Spike				Run: ICPMS1-C_080307A				03/07/08 15:29
Arsenic	0.054	mg/L	0.0010	104	70	130			
Selenium	0.052	mg/L	0.0010	103	70	130			
Titanium	0.053	mg/L	0.10	104	70	130			
Sample ID: C08021079-001DMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_080307A				03/07/08 15:36
Arsenic	0.056	mg/L	0.0010	108	70	130	3.0	20	
Selenium	0.055	mg/L	0.0010	109	70	130	5.7	20	
Titanium	0.055	mg/L	0.10	108	70	130	0.0	20	
Sample ID: C08030149-001AMS4	Post Digestion Spike				Run: ICPMS1-C_080307A				03/07/08 23:36
Arsenic	0.280	mg/L	0.0010	110	70	130			
Selenium	0.266	mg/L	0.0020	104	70	130			
Titanium	0.263	mg/L	0.10	104	70	130			
Sample ID: C08030149-001AMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_080307A				03/08/08 00:14
Arsenic	0.278	mg/L	0.0010	109	70	130	0.9	20	
Selenium	0.265	mg/L	0.0020	104	70	130	0.2	20	
Titanium	0.268	mg/L	0.10	106	70	130	1.9	20	
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS1-C_080307A				03/07/08 14:29
Arsenic	0.0541	mg/L	0.0010	108	85	115			
Selenium	0.0535	mg/L	0.0010	106	85	115			
Titanium	0.0528	mg/L	0.10	106	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0803010

Report Date: 03/11/08
Work Order: C08030135

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada mod									**Batch: B_R107288**
Sample ID: LFB-4	Laboratory Fortified Blank				Run: SUB-B107288				03/08/08 11:52
Cyanide, Total	0.103	mg/L	0.0050	103	90	110			
Sample ID: MBLK-5	Method Blank				Run: SUB-B107288				03/08/08 11:54
Cyanide, Total	ND	mg/L	0.003						
Sample ID: C08030145-001D	Sample Matrix Spike				Run: SUB-B107288				03/08/08 11:57
Cyanide, Total	0.0994	mg/L	0.0050	99	90	110			
Sample ID: C08030145-001D	Sample Matrix Spike Duplicate				Run: SUB-B107288				03/08/08 11:59
Cyanide, Total	0.0958	mg/L	0.0050	96	90	110			

Qualifiers:
RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A
Work Order: 0803010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	R27573	Analysis Date:	3/4/2008 10:16:47 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	R27573	Analysis Date:	3/4/2008 10:34:12 AM	
Fluoride	0.5168	mg/L	0.10	103	90	110			
Chloride	5.110	mg/L	0.10	102	90	110			
Nitrate (As N)+Nitrite (As N)	3.559	mg/L	0.20	102	90	110			
Sulfate	10.44	mg/L	0.50	104	90	110			
Method: EPA Method 9067: Total Phenolics									
Sample ID: MB-15255		*MBLK*			Batch ID:	15281	Analysis Date:	3/5/2008	
Phenolics, Total Recoverable	ND	µg/L	2.5						
Sample ID: LCS-15255		*LCS*			Batch ID:	15281	Analysis Date:	3/5/2008	
Phenolics, Total Recoverable	17.61	µg/L	2.5	88.0	51.7	133			
Sample ID: LCSD-15255		*LCSD*			Batch ID:	15281	Analysis Date:	3/5/2008	
Phenolics, Total Recoverable	17.94	µg/L	2.5	89.7	51.7	133	1.86	0	
Method: EPA Method 504.1: EDB									
Sample ID: MB-15300		*MBLK*			Batch ID:	15300	Analysis Date:	3/6/2008 6:28:04 PM	
1,2-Dibromoethane	ND	µg/L	0.010						
Sample ID: LCS-15300		*LCS*			Batch ID:	15300	Analysis Date:	3/6/2008 6:39:58 PM	
1,2-Dibromoethane	0.09800	µg/L	0.010	98.0	70	130			
Sample ID: LCSD-15300		*LCSD*			Batch ID:	15300	Analysis Date:	3/6/2008 6:51:54 PM	
1,2-Dibromoethane	0.1110	µg/L	0.010	111	70	130	12.4	13.5	
Method: EPA Method 8082: PCB's									
Sample ID: MB-15293		*MBLK*			Batch ID:	15293	Analysis Date:	3/10/2008 3:06:45 PM	
Aroclor 1016	ND	µg/L	1.0						
Aroclor 1221	ND	µg/L	5.0						
Aroclor 1232	ND	µg/L	1.0						
Aroclor 1242	ND	µg/L	1.0						
Aroclor 1248	ND	µg/L	1.0						
Aroclor 1254	ND	µg/L	1.0						
Aroclor 1260	ND	µg/L	1.0						
Sample ID: LCS-15293		*LCS*			Batch ID:	15293	Analysis Date:	3/10/2008 3:55:20 PM	
Aroclor 1260	2.784	µg/L	1.0	55.7	47.6	119			
Sample ID: LCSD-15293		*LCSD*			Batch ID:	15293	Analysis Date:	3/10/2008 4:43:54 PM	
Aroclor 1260	3.014	µg/L	1.0	60.3	47.6	119	7.93	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0803010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: R27569		Analysis Date: 3/4/2008 8:02:30 AM		
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0803010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R27569	Analysis Date:	3/4/2008 6:02:30 AM	
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R27569	Analysis Date:	3/4/2008 8:26:03 AM	
Benzene	20.10	µg/L	1.0	101	72.4	126			
Toluene	19.38	µg/L	1.0	96.8	79.2	115			
Chlorobenzene	18.99	µg/L	1.0	95.0	83.1	111			
1,1-Dichloroethene	18.80	µg/L	1.0	94.0	81.4	122			
Trichloroethene (TCE)	18.35	µg/L	1.0	91.7	84.4	118			

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0803010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: MB-15290		*MBLK*			Batch ID:	15290	Analysis Date:	3/7/2008 8:34:38 PM	
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	2.0						
2-Methylnaphthalene	ND	µg/L	2.0						
Acenaphthylene	ND	µg/L	2.5						
Acenaphthene	ND	µg/L	5.0						
Fluorene	ND	µg/L	0.80						
Phenanthrene	ND	µg/L	0.80						
Anthracene	ND	µg/L	0.60						
Fluoranthene	ND	µg/L	0.30						
Pyrene	ND	µg/L	0.30						
Benz(a)anthracene	ND	µg/L	0.070						
Chrysene	ND	µg/L	0.20						
Benzo(b)fluoranthene	ND	µg/L	0.10						
Benzo(k)fluoranthene	ND	µg/L	0.070						
Benzo(a)pyrene	ND	µg/L	0.070						
Dibenz(a,h)anthracene	ND	µg/L	0.070						
Benzo(g,h,i)perylene	ND	µg/L	0.080						
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080						
Sample ID: LCS-15290		*LCS*			Batch ID:	15290	Analysis Date:	3/7/2008 9:22:39 PM	
Naphthalene	27.37	µg/L	2.0	68.4	37.3	91.2			
1-Methylnaphthalene	27.61	µg/L	2.0	68.6	36.7	91.2			
2-Methylnaphthalene	26.84	µg/L	2.0	67.1	35.8	91.6			
Acenaphthylene	27.58	µg/L	2.5	68.7	14.4	114			
Acenaphthene	28.09	µg/L	5.0	70.2	43.9	96.5			
Fluorene	2.760	µg/L	0.80	68.8	47.4	102			
Phenanthrene	1.360	µg/L	0.80	67.2	46.9	107			
Anthracene	1.460	µg/L	0.60	72.1	49.1	110			
Fluoranthene	3.080	µg/L	0.30	76.8	44.8	102			
Pyrene	2.760	µg/L	0.30	68.8	49.2	104			
Benz(a)anthracene	0.2900	µg/L	0.070	72.3	50.6	113			
Chrysene	1.430	µg/L	0.20	71.1	41.3	98.5			
Benzo(b)fluoranthene	0.3600	µg/L	0.10	71.9	52.7	108			
Benzo(k)fluoranthene	0.1800	µg/L	0.070	72.0	44.9	105			
Benzo(a)pyrene	0.1700	µg/L	0.070	67.7	52.8	115			
Dibenz(a,h)anthracene	0.3600	µg/L	0.070	71.9	50.5	108			
Benzo(g,h,i)perylene	0.3600	µg/L	0.080	72.0	56.4	108			
Indeno(1,2,3-cd)pyrene	0.6490	µg/L	0.080	64.8	15.1	117			
Sample ID: LCSD-15290		*LCSD*			Batch ID:	15290	Analysis Date:	3/7/2008 10:10:39 PM	
Naphthalene	28.07	µg/L	2.0	70.2	37.3	91.2	2.53	32.1	
1-Methylnaphthalene	28.47	µg/L	2.0	71.0	36.7	91.2	3.43	32.7	
2-Methylnaphthalene	28.52	µg/L	2.0	71.3	35.8	91.6	6.07	34	
Acenaphthylene	29.38	µg/L	2.5	73.3	14.4	114	6.39	38.8	
Acenaphthene	30.28	µg/L	5.0	75.7	43.9	96.5	7.50	36.6	
Fluorene	3.180	µg/L	0.80	79.3	47.4	102	14.1	29.3	

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0803010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: LCSD-15290		*LCSD*			Batch ID:	15290	Analysis Date:		3/7/2008 10:10:39 PM
Phenanthrene	1.640	µg/L	0.60	81.6	46.9	107	19.4	25	
Anthracene	1.700	µg/L	0.60	84.6	49.1	110	15.9	23.9	
Fluoranthene	3.400	µg/L	0.30	84.6	44.8	102	9.88	15.7	
Pyrene	3.360	µg/L	0.30	83.8	49.2	104	19.6	15.3	R
Benz(a)anthracene	0.4600	µg/L	0.070	115	50.5	113	45.3	19	SR
Chrysene	1.780	µg/L	0.20	88.6	41.3	98.5	21.8	16.6	R
Benzo(b)fluoranthene	0.5100	µg/L	0.10	102	52.7	108	34.5	21.7	R
Benzo(k)fluoranthene	0.3300	µg/L	0.070	132	44.9	105	68.6	19.4	SR
Benzo(a)pyrene	0.3000	µg/L	0.070	120	52.8	115	55.3	16.7	SR
Dibenz(a,h)anthracene	0.5300	µg/L	0.070	106	50.5	108	38.2	17.3	R
Benzo(g,h,i)perylene	0.5200	µg/L	0.080	104	55.4	108	36.4	18	R
Indeno(1,2,3-cd)pyrene	0.9120	µg/L	0.080	91.0	15.1	117	33.7	17.7	R
Method: EPA Method 7470: Mercury									
Sample ID: MB-15284		*MBLK*			Batch ID:	15284	Analysis Date:		3/4/2008 7:13:03 PM
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-15284		*LCS*			Batch ID:	15284	Analysis Date:		3/4/2008 7:14:47 PM
Mercury	0.005022	mg/L	0.00020	100	80	120			

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0803010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: MB		*MBLK*			Batch ID:	R27660	Analysis Date:	3/11/2008 12:15:01 PM	
Aluminum	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Boron	ND	mg/L	0.040						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Cobalt	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Iron	ND	mg/L	0.020						
Lead	ND	mg/L	0.0060						
Manganese	ND	mg/L	0.0020						
Molybdenum	ND	mg/L	0.0060						
Nickel	ND	mg/L	0.010						
Silver	ND	mg/L	0.0060						
Zinc	ND	mg/L	0.050						
Sample ID: LCS		*LCS*			Batch ID:	R27660	Analysis Date:	3/11/2008 12:18:00 PM	
Aluminum	0.5174	mg/L	0.020	103	80	120			
Barium	0.5016	mg/L	0.020	100	80	120			
Boron	0.5341	mg/L	0.040	107	80	120			
Cadmium	0.5108	mg/L	0.0020	102	80	120			
Chromium	0.5040	mg/L	0.0060	101	80	120			
Cobalt	0.4937	mg/L	0.0060	98.7	80	120			
Copper	0.5017	mg/L	0.0060	100	80	120			
Iron	0.5177	mg/L	0.020	104	80	120			
Lead	0.4966	mg/L	0.0060	99.7	80	120			
Manganese	0.4958	mg/L	0.0020	99.2	80	120			
Molybdenum	0.5169	mg/L	0.0060	103	80	120			
Nickel	0.4631	mg/L	0.010	98.6	80	120			
Silver	0.5134	mg/L	0.0060	103	80	120			
Zinc	0.5063	mg/L	0.050	101	80	120			
Method: SM 2540C: TDS									
Sample ID: MB-15299		*MBLK*			Batch ID:	15299	Analysis Date:	3/5/2008	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-15299		*LCS*			Batch ID:	15299	Analysis Date:	3/5/2008	
Total Dissolved Solids	1002	mg/L	20	100	80	120			

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL | Date Received: 3/4/2008

Work Order Number 0803010 | Received by: TLS

Sample ID labels checked by _____ Initials

Checklist completed by: _____ Signature | 3/4/08 Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 7° <6° C *Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Animas Environmental Services

Address: 624 E. Comanche
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush

Project Name: San Juan Lateral Loop A

Project #: Transwestern Pipeline

Project Manager: Ross Kennemer

Sampler: Ross Kennemer

On Ice: [illegible]

Sample Temperature: [illegible]

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	~~EDC (Method 8260)~~	8310 (PNA or PAH)	~~Anions (F,Cl,NO3,NO2,PO4,SO4)~~	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA) PAHs	Nitrate	Diss. Metals (see list)	Total Mercury	Total Cyanide	Phenols	Air Bubbles (Y or N)
3/3/08	0845	Hydrostatic Test Water	14 (mixed)	HCl, HNO3, NaOH, H2SO4	0803010-1					X			X	X	X	X	X	X	X	X		
		Trip Blank			-2					X					X							

Date	Time	Relinquished by	Received by
3/3/08	1750	Ross Kennemer / Ice	L. Cupps
3/3/08	1800	L. Cupps	Jamie S 3/4/08 855

Remarks:
*Note: Sample parameters and methods are pursuant to NMAC 20.6.2.3103 A, B, + C.
Refer to HEAL No: 0801276-1
*Radiologicals have been excluded

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised June 10, 2003

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ ☐Verbal Approval Received: Yes ☒ No ☐	4. Generator Transwestern Pipeline, LLC 5. Originating Site Bloomfield Compressor Sta.
2. Management Facility Destination Key Energy Disposal	6. Transporter Key Energy
3. Address of Facility Operator #345 CR 350, Aztec, NM 87410	8. State NM
7. Location of Material (Street Address or ULSTR) 73 CR 4935, Lot 41	Bloomfield, NM 87413

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Approximately 2,500 barrels of water used for hydrostatic testing of new pipe and fittings within existing Bloomfield Compressor Station. Water for hydrostatic testing will come from Bloomfield municipal water supply.

Estimated Volume 2500 BBLS. cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE Ray Rupp TITLE: SUPERVISOR DATE: 3-26-08
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Ray Rupp TELEPHONE NO. 505-334-6186

E-MAIL ADDRESS RRUPP@KEYENERGY.COM

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Tuesday, February 26, 2008

Ross Kennemer
Animas Environmental Services
624 East Comanche
Farmington, NM 87401

TEL: (505) 564-2281
FAX (505) 324-2022

RE: Dugan's Ditch

Order No.: 0801276

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 1/26/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
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Hall Environmental Analysis Laboratory, Inc.

Date: *26-Feb-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Baseline Analysis
Lab Order:	0801276	**Collection Date:**	1/25/2008 1:08:00 PM
Project:	Dugan's Ditch	**Date Received:**	1/26/2008
Lab ID:	0801276-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JAT
1,2-Dibromoethane	ND	0.010		µg/L	1	1/28/2008 10:26:32 PM
Surr: 1,2,3-Trichloropropane	95.3	54.9-136		%REC	1	1/28/2008 10:26:32 PM
EPA METHOD 8082: PCB'S						Analyst: JMP
Aroclor 1016	ND	1.0		µg/L	1	2/21/2008 3:51:00 AM
Aroclor 1221	ND	5.0		µg/L	1	2/21/2008 3:51:00 AM
Aroclor 1232	ND	1.0		µg/L	1	2/21/2008 3:51:00 AM
Aroclor 1242	ND	1.0		µg/L	1	2/21/2008 3:51:00 AM
Aroclor 1248	ND	1.0		µg/L	1	2/21/2008 3:51:00 AM
Aroclor 1254	ND	1.0		µg/L	1	2/21/2008 3:51:00 AM
Aroclor 1260	ND	1.0		µg/L	1	2/21/2008 3:51:00 AM
Surr: Decachlorobiphenyl	76.0	23.9-124		%REC	1	2/21/2008 3:51:00 AM
Surr: Tetrachloro-m-xylene	81.6	28.1-139		%REC	1	2/21/2008 3:51:00 AM
EPA METHOD 8310: PAHS						Analyst: JMP
Naphthalene	ND	2.0		µg/L	1	2/2/2008 1:14:31 AM
1-Methylnaphthalene	ND	2.0		µg/L	1	2/2/2008 1:14:31 AM
2-Methylnaphthalene	ND	2.0		µg/L	1	2/2/2008 1:14:31 AM
Acenaphthylene	ND	2.5		µg/L	1	2/2/2008 1:14:31 AM
Acenaphthene	ND	5.0		µg/L	1	2/2/2008 1:14:31 AM
Fluorene	ND	0.80		µg/L	1	2/2/2008 1:14:31 AM
Phenanthrene	ND	0.60		µg/L	1	2/2/2008 1:14:31 AM
Anthracene	ND	0.60		µg/L	1	2/2/2008 1:14:31 AM
Fluoranthene	ND	0.30		µg/L	1	2/2/2008 1:14:31 AM
Pyrene	ND	0.30		µg/L	1	2/2/2008 1:14:31 AM
Benz(a)anthracene	ND	0.050		µg/L	1	2/2/2008 1:14:31 AM
Chrysene	ND	0.20		µg/L	1	2/2/2008 1:14:31 AM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	2/2/2008 1:14:31 AM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	2/2/2008 1:14:31 AM
Benzo(a)pyrene	ND	0.030		µg/L	1	2/2/2008 1:14:31 AM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	2/2/2008 1:14:31 AM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	2/2/2008 1:14:31 AM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/2/2008 1:14:31 AM
Surr: Benzo(e)pyrene	85.8	68-116		%REC	1	2/2/2008 1:14:31 AM
EPA METHOD 300.0: ANIONS						Analyst: SLB
Fluoride	0.16	0.10		mg/L	1	1/29/2008 10:52:16 AM
Chloride	2.6	0.10		mg/L	1	1/29/2008 10:52:16 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/29/2008 11:27:08 AM
Sulfate	37	0.50		mg/L	1	1/29/2008 10:52:16 AM
EPA METHOD 7470: MERCURY						Analyst: TES

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Feb-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Baseline Analysis
Lab Order:	0801276	**Collection Date:**	1/25/2008 1:08:00 PM
Project:	Dugan's Ditch	**Date Received:**	1/26/2008
Lab ID:	0801276-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: TES
Mercury	ND	0.00020		mg/L	1	2/14/2008 4:47:45 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: TES
Aluminum	0.061	0.020		mg/L	1	2/25/2008 12:29:10 PM
Barium	0.070	0.020		mg/L	1	2/25/2008 12:29:10 PM
Boron	ND	0.040		mg/L	1	2/25/2008 12:29:10 PM
Cadmium	ND	0.0020		mg/L	1	2/25/2008 12:29:10 PM
Chromium	ND	0.0060		mg/L	1	2/25/2008 12:29:10 PM
Cobalt	ND	0.0060		mg/L	1	2/25/2008 2:24:47 PM
Copper	ND	0.0060		mg/L	1	2/25/2008 12:29:10 PM
Iron	0.046	0.020		mg/L	1	2/25/2008 12:29:10 PM
Lead	ND	0.0050		mg/L	1	2/25/2008 12:29:10 PM
Manganese	0.016	0.0020		mg/L	1	2/25/2008 12:29:10 PM
Molybdenum	ND	0.0080		mg/L	1	2/25/2008 12:29:10 PM
Nickel	ND	0.010		mg/L	1	2/25/2008 12:29:10 PM
Silver	ND	0.0050		mg/L	1	2/25/2008 12:29:10 PM
Zinc	ND	0.050		mg/L	1	2/25/2008 12:29:10 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Toluene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Ethylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Naphthalene	ND	2.0		µg/L	1	2/5/2008 12:42:47 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	2/5/2008 12:42:47 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	2/5/2008 12:42:47 PM
Acetone	ND	10		µg/L	1	2/5/2008 12:42:47 PM
Bromobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Bromochloromethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Bromodichloromethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Bromoform	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Bromomethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
2-Butanone	ND	10		µg/L	1	2/5/2008 12:42:47 PM
Carbon disulfide	ND	10		µg/L	1	2/5/2008 12:42:47 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Chlorobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Chloroethane	ND	2.0		µg/L	1	2/5/2008 12:42:47 PM
Chloroform	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Date: *26-Feb-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Baseline Analysis
Lab Order:	0801276	**Collection Date:**	1/25/2008 1:08:00 PM
Project:	Dugan's Ditch	**Date Received:**	1/26/2008
Lab ID:	0801276-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Chloromethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
2-Chlorotoluene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
4-Chlorotoluene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
cis-1,2-DCE	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/5/2008 12:42:47 PM
Dibromochloromethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Dibromomethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	2/5/2008 12:42:47 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
2-Hexanone	ND	10		µg/L	1	2/5/2008 12:42:47 PM
Isopropylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	2/5/2008 12:42:47 PM
Methylene Chloride	ND	3.0		µg/L	1	2/5/2008 12:42:47 PM
n-Butylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
n-Propylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
sec-Butylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Styrene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
tert-Butylbenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/5/2008 12:42:47 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
trans-1,2-DCE	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/5/2008 12:42:47 PM
Vinyl chloride	ND	1.0		µg/L	1	2/5/2008 12:42:47 PM

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J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Feb-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Baseline Analysis
Lab Order:	0801276	**Collection Date:**	1/25/2008 1:08:00 PM
Project:	Dugan's Ditch	**Date Received:**	1/26/2008
Lab ID:	0801276-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Xylenes, Total	ND	1.5		µg/L	1	2/5/2008 12:42:47 PM
Surr: 1,2-Dichloroethane-d4	82.3	68.1-123		%REC	1	2/5/2008 12:42:47 PM
Surr: 4-Bromofluorobenzene	86.8	83.2-145		%REC	1	2/5/2008 12:42:47 PM
Surr: Dibromofluoromethane	89.4	88.5-119		%REC	1	2/5/2008 12:42:47 PM
Surr: Toluene-d8	83.0	64-131		%REC	1	2/5/2008 12:42:47 PM
EPA METHOD 9067: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	ND	2.5		µg/L	1	2/1/2008
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: SMP
Specific Conductance	230	0.010		µmhos/cm	1	2/14/2008
SM4500-H+B: PH						Analyst: TAF
pH	7.91	0.1		pH units	1	1/28/2008
SM 2540C: TDS						Analyst: TAF
Total Dissolved Solids	160	20		mg/L	1	1/31/2008

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0801276
Lab ID: C08011151-001
Client Sample ID: Baseline Analysis

Report Date: 02/15/08
Collection Date: 01/25/08 13:08
DateReceived: 01/29/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
NON-METALS							
Cyanide, Total	ND	mg/L		0.0050		Kelada mod	01/31/08 13:29 / el-b
METALS - DISSOLVED							
Arsenic	ND	mg/L		0.001		SW6020	02/01/08 00:46 / eml
Selenium	ND	mg/L		0.001		SW6020	02/01/08 00:46 / eml
Uranium	ND	mg/L		0.001		SW6020	02/01/08 00:46 / eml
RADIONUCLIDES - TOTAL							
Radium 226	ND	pCi/L		0.2		E903.0	02/13/08 10:37 / tal
Radium 228	ND	pCi/L		1.0		RA-05	02/08/08 10:18 / pij

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0801276

Report Date: 02/15/08
Work Order: C08011151

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R98410
Sample ID: LRB	Method Blank				Run: ICPMS1-C_080131A				01/31/08 14:22
Arsenic	ND	mg/L	0.0002						
Selenium	ND	mg/L	0.0004						
Uranium	ND	mg/L	4E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS1-C_080131A				01/31/08 14:30
Arsenic	0.0499	mg/L	0.0010	100	85	115			
Selenium	0.0503	mg/L	0.0010	101	85	115			
Uranium	0.0494	mg/L	0.00030	99	85	115			
Method: E903.0									Batch: RA226-2606
Sample ID: C08011206-006AMS	Sample Matrix Spike				Run: BERTHOLD 770_080201B				02/13/08 10:37
Radium 226	23	pCi/L	0.20	109	70	130			
Sample ID: C08011206-006AMSD	Sample Matrix Spike Duplicate				Run: BERTHOLD 770_080201B				02/13/08 10:37
Radium 226	22	pCi/L	0.20	105	70	130	3.5	28.8	
Sample ID: MB-RA226-2606	Method Blank				Run: BERTHOLD 770_080201B				02/13/08 11:59
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2606	Laboratory Control Sample				Run: BERTHOLD 770_080201B				02/13/08 11:59
Radium 226	15	pCi/L	0.20	116	70	130			
Method: Kelada mod									Analytical Run: SUB-B105904
Sample ID: ICV-1	Initial Calibration Verification Standard								01/31/08 12:59
Cyanide, Total	0.153	mg/L	0.0050	102	90	110			
Method: Kelada mod									Batch: B_R105904
Sample ID: LFB-4	Laboratory Fortified Blank				Run: SUB-B105904				01/31/08 13:05
Cyanide, Total	0.109	mg/L	0.0050	109	90	110			
Sample ID: MBLK-5	Method Blank				Run: SUB-B105904				01/31/08 13:07
Cyanide, Total	ND	mg/L	0.001						
Sample ID: B08011769-001EMS	Sample Matrix Spike				Run: SUB-B105904				01/31/08 13:16
Cyanide, Total	0.0941	mg/L	0.0050	94	90	110			
Sample ID: B08011769-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-B105904				01/31/08 13:18
Cyanide, Total	0.0909	mg/L	0.0050	91	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0801276

Report Date: 02/15/08
Work Order: C08011151

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05									Batch: RA228-2018
Sample ID: LCS-228-RA228-2608	Laboratory Control Sample				Run: TENNELEC-3_080201B			02/08/08 10:18	
Radium 228	20	pCi/L	1.0	99	70	130			
Sample ID: MB-RA228-2608	Method Blank				Run: TENNELEC-3_080201B			02/08/08 10:18	
Radium 228	ND	pCi/L	1						
Sample ID: C08011259-003CMS	Sample Matrix Spike				Run: TENNELEC-3_080201B			02/08/08 10:18	
Radium 228	32	pCi/L	1.0	94	70	130			
Sample ID: C08011259-003CMSD	Sample Matrix Spike Duplicate				Run: TENNELEC-3_080201B			02/08/08 10:18	
Radium 228	34	pCi/L	1.0	100	70	130	6.2	25.9	
Method: SW6020									Batch: R96410
Sample ID: C08011151-001CMS4	Post Digestion Spike				Run: ICPMS1-C_080131A			02/01/08 00:53	
Arsenic	0.0515	mg/L	0.0010	102	75	125			
Selenium	0.0563	mg/L	0.0010	113	75	125			
Uranium	0.0529	mg/L	0.00030	106	75	125			
Sample ID: C08011151-001CMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_080131A			02/01/08 01:01	
Arsenic	0.0516	mg/L	0.0010	102	75	125	0.2	20	
Selenium	0.0525	mg/L	0.0010	105	75	125	7.0	20	
Uranium	0.0527	mg/L	0.00030	105	75	125	0.5	20	

Qualifiers:

RL - Analyte reporting limit.

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QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Dugan's Ditch **Work Order:** 0801276

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	R27120	Analysis Date:	1/29/2008 10:00:03 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	R27133	Analysis Date:	1/30/2008 9:26:03 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	R27120	Analysis Date:	1/29/2008 10:17:27 AM	
Fluoride	0.5300	mg/L	0.10	106	90	110			
Chloride	5.244	mg/L	0.10	105	90	110			
Nitrate (As N)+Nitrite (As N)	3.659	mg/L	0.20	105	90	110			
Sulfate	10.58	mg/L	0.50	106	90	110			
Sample ID: LCS		*LCS*			Batch ID:	R27133	Analysis Date:	1/30/2008 9:45:28 AM	
Fluoride	0.5628	mg/L	0.10	113	90	110			S
Chloride	5.091	mg/L	0.10	102	90	110			
Nitrate (As N)+Nitrite (As N)	3.677	mg/L	0.20	105	90	110			
Sulfate	10.13	mg/L	0.50	101	90	110			
Method: EPA Method 504.1: EDB									
Sample ID: MB-14998		*MBLK*			Batch ID:	14998	Analysis Date:	1/28/2008 8:28:22 PM	
1,2-Dibromoethane	ND	µg/L	0.010						
Sample ID: LCS-14998		*LCS*			Batch ID:	14998	Analysis Date:	1/28/2008 8:45:19 PM	
1,2-Dibromoethane	0.1110	µg/L	0.010	111	70	130			
Sample ID: LCSD-14998		*LCSD*			Batch ID:	14998	Analysis Date:	1/28/2008 9:02:13 PM	
1,2-Dibromoethane	0.1050	µg/L	0.010	105	70	130	5.56	13.5	
Method: EPA Method 8082: PCB's									
Sample ID: MB-14991		*MBLK*			Batch ID:	14991	Analysis Date:	2/20/2008 10:58:27 PM	
Aroclor 1016	ND	µg/L	1.0						
Aroclor 1221	ND	µg/L	5.0						
Aroclor 1232	ND	µg/L	1.0						
Aroclor 1242	ND	µg/L	1.0						
Aroclor 1248	ND	µg/L	1.0						
Aroclor 1254	ND	µg/L	1.0						
Aroclor 1260	ND	µg/L	1.0						
Sample ID: LCS-14991		*LCS*			Batch ID:	14991	Analysis Date:	2/20/2008 11:47:28 PM	
Aroclor 1260	3.162	µg/L	1.0	63.2	47.6	119			
Sample ID: LCSD-14991		*LCSD*			Batch ID:	14991	Analysis Date:	2/21/2008 12:36:21 AM	
Aroclor 1260	3.058	µg/L	1.0	61.2	47.6	119	3.34	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Dugan's Ditch
Work Order: 0801276

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R27203**	Analysis Date:	2/5/2008 8:00:04 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Dugan's Ditch **Work Order:** 0801276

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	R27203	Analysis Date:	2/5/2008 8:00:04 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R27203	Analysis Date:	2/5/2008 8:56:51 AM	
Benzene	19.74	µg/L	1.0	98.7	72.4	126			
Toluene	18.01	µg/L	1.0	90.0	79.2	115			
Chlorobenzene	21.89	µg/L	1.0	109	83.1	111			
1,1-Dichloroethene	21.68	µg/L	1.0	108	81.4	122			
Trichloroethene (TCE)	18.67	µg/L	1.0	93.4	84.4	118			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Dugan's Ditch **Work Order:** 0801276

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: MB-14985		*MBLK*			Batch ID:	14985	Analysis Date:	1/31/2008 11:09:53 AM	
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	2.0						
2-Methylnaphthalene	ND	µg/L	2.0						
Acenaphthylene	ND	µg/L	2.5						
Acenaphthene	ND	µg/L	5.0						
Fluorene	ND	µg/L	0.80						
Phenanthrene	ND	µg/L	0.60						
Anthracene	ND	µg/L	0.60						
Fluoranthene	ND	µg/L	0.30						
Pyrene	ND	µg/L	0.30						
Benz(a)anthracene	ND	µg/L	0.050						
Chrysene	ND	µg/L	0.20						
Benzo(b)fluoranthene	ND	µg/L	0.10						
Benzo(k)fluoranthene	ND	µg/L	0.020						
Benzo(a)pyrene	ND	µg/L	0.030						
Dibenz(a,h)anthracene	ND	µg/L	0.040						
Benzo(g,h,i)perylene	ND	µg/L	0.080						
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080						
Sample ID: LCS-14985		*LCS*			Batch ID:	14985	Analysis Date:	1/31/2008 11:57:52 AM	
Naphthalene	30.13	µg/L	2.0	75.3	33.9	87.9			
1-Methylnaphthalene	30.29	µg/L	2.0	75.6	36.2	86			
2-Methylnaphthalene	30.38	µg/L	2.0	75.0	33.7	83.9			
Acenaphthylene	28.74	µg/L	2.5	71.7	56	97.9			
Acenaphthene	31.95	µg/L	5.0	79.9	42.2	86.6			
Fluorene	3.360	µg/L	0.80	83.9	47.3	85.1			
Phenanthrene	1.730	µg/L	0.60	86.1	53.5	97.3			
Anthracene	1.820	µg/L	0.60	90.5	53.6	93.7			
Fluoranthene	3.200	µg/L	0.30	79.8	60.1	98.8			
Pyrene	3.340	µg/L	0.30	83.3	57.5	108			
Benz(a)anthracene	0.3700	µg/L	0.050	92.3	57.7	106			
Chrysene	1.480	µg/L	0.20	73.6	59.1	112			
Benzo(b)fluoranthene	0.4300	µg/L	0.10	85.8	67	110			
Benzo(k)fluoranthene	0.2000	µg/L	0.020	80.0	63.2	106			
Benzo(a)pyrene	0.2300	µg/L	0.030	80.6	49.7	109			
Dibenz(a,h)anthracene	0.4400	µg/L	0.040	87.8	54.1	111			
Benzo(g,h,i)perylene	0.4500	µg/L	0.080	78.0	51.3	111			
Indeno(1,2,3-cd)pyrene	0.7560	µg/L	0.080	75.4	52.3	103			
Sample ID: LCSD-14985		*LCSD*			Batch ID:	14985	Analysis Date:	1/31/2008 12:45:51 PM	
Naphthalene	30.22	µg/L	2.0	75.6	33.9	87.9	0.298	32.1	
1-Methylnaphthalene	30.08	µg/L	2.0	75.0	36.2	86	0.696	32.7	
2-Methylnaphthalene	30.06	µg/L	2.0	75.1	33.7	83.9	1.09	34	
Acenaphthylene	30.30	µg/L	2.5	75.8	56	97.9	5.29	38.8	
Acenaphthene	31.87	µg/L	5.0	79.7	42.2	86.6	0.251	38.6	
Fluorene	3.380	µg/L	0.80	84.3	47.3	85.1	0.593	29.3	

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Dugan's Ditch
Work Order: 0801276

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: LCSD-14985		*LCSD*			Batch ID:	14985	Analysis Date:	1/31/2008 12:45:51 PM	
Phenanthrene	1.810	µg/L	0.60	90.0	53.5	97.3	4.52	25	
Anthracene	1.880	µg/L	0.60	93.5	53.6	93.7	3.24	23.9	
Fluoranthene	3.420	µg/L	0.30	85.3	60.1	98.5	6.65	16.7	
Pyrene	3.640	µg/L	0.30	90.8	57.5	108	6.60	16.3	
Benz(a)anthracene	0.3900	µg/L	0.050	97.3	57.7	108	5.26	19	
Chrysene	1.810	µg/L	0.20	90.1	59.1	112	6.41	16.6	
Benzo(b)fluoranthene	0.4600	µg/L	0.10	91.8	67	110	6.74	21.7	
Benzo(k)fluoranthene	0.2200	µg/L	0.020	88.0	53.2	108	9.52	19.4	
Benzo(a)pyrene	0.2400	µg/L	0.030	84.5	49.7	109	4.26	16.7	
Dibenz(a,h)anthracene	0.4800	µg/L	0.040	95.8	54.1	111	8.70	17.3	
Benzo(g,h,i)perylene	0.4900	µg/L	0.080	98.0	51.3	111	8.51	18	
Indeno(1,2,3-cd)pyrene	0.8400	µg/L	0.080	83.8	52.3	103	10.8	17.7	
Method: EPA Method 7470: Mercury									
Sample ID: MB-15146		*MBLK*			Batch ID:	15146	Analysis Date:	2/14/2008 4:37:08 PM	
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-15146		*LCS*			Batch ID:	15146	Analysis Date:	2/14/2008 4:38:53 PM	
Mercury	0.004922	mg/L	0.00020	98.4	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Dugan's Ditch **Work Order:** 0801276

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: MBLK		*MBLK*			Batch ID:	R27475	Analysis Date:	2/25/2008 3:14:15 PM	
Aluminum	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Boron	ND	mg/L	0.040						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Cobalt	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Iron	ND	mg/L	0.020						
Lead	ND	mg/L	0.0050						
Manganese	ND	mg/L	0.0020						
Molybdenum	ND	mg/L	0.0080						
Nickel	ND	mg/L	0.010						
Silver	ND	mg/L	0.0050						
Zinc	ND	mg/L	0.050						
Sample ID: LCS		*LCS*			Batch ID:	R27475	Analysis Date:	2/25/2008 3:17:14 PM	
Aluminum	0.5045	mg/L	0.020	101	80	120			
Barium	0.4871	mg/L	0.020	97.4	80	120			
Boron	0.5475	mg/L	0.040	109	80	120			
Cadmium	0.4971	mg/L	0.0020	99.4	80	120			
Chromium	0.4991	mg/L	0.0060	99.8	80	120			
Cobalt	0.5437	mg/L	0.0060	109	80	120			
Copper	0.4962	mg/L	0.0060	99.2	80	120			
Iron	0.4825	mg/L	0.020	96.5	80	120			
Lead	0.4778	mg/L	0.0050	95.6	80	120			
Manganese	0.4863	mg/L	0.0020	97.3	80	120			
Molybdenum	0.5008	mg/L	0.0080	100	80	120			
Nickel	0.4602	mg/L	0.010	92.0	80	120			
Silver	0.4887	mg/L	0.0050	97.7	80	120			
Zinc	0.4865	mg/L	0.050	97.3	80	120			
Method: SM 2540C: TDS									
Sample ID: MB-15024		*MBLK*			Batch ID:	15024	Analysis Date:	1/31/2008	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-15024		*LCS*			Batch ID:	15024	Analysis Date:	1/31/2008	
Total Dissolved Solids	1026	mg/L	20	103	80	120			

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL | Date Received: 1/28/2008

Work Order Number 0801276 | Received by: NJM

Sample ID labels checked by _____ Initials

Checklist completed by: _____ Signature | 1/28/08 Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Animas Environmental Services

Address: 624 E. Comanche

Farmington, NM 87401

Phone #: (505) 564-2281

email or Fax#: (505) 327-2022

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush _____

Project Name: Dugan's Ditch Baseline Irrigation Water Sample

Project #:

Project Manager: Ross Kennemer

Sampler: Ross Kennemer

On Ice: ☒ Yes ☐ No

Sample Temperature: 4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0801276	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	~~EDC (Method 8260)~~ R. Kennemer	8310 (PNA or PAH)	~~Anions (F,Cl,NO3,NO2,PO4,SO4)~~	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA) PAHs	Diss. Metals (see attached list)	Total Mercury	Total Cyanide	Radiologicals	Phenols	Air Bubbles (Y or N)
1-25-08	1308	Baseline Analysis	15 (mixed)	HCl, HNO3, HNO3, H2SO4	1					X	X		X	X	X	X	X	X	X	X	X	

Date:	Time:	Relinquished by:	Received by:
1-25-08	1600	Ross Kennemer	1/26/08 11:36
Date:	Time:	Relinquished by:	Received by:

Remarks: * Note: Sample parameters and methods are pursuant to NMAC 20.6.2.3103-A,B,&C

This list is attached to this COC.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, April 16, 2008

Ross Kennemer
Animas Environmental Services
624 East Comanche
Farmington, NM 87401

TEL: (505) 564-2281
FAX (505) 324-2022

RE: San Juan Lateral Loop A

Order No.: 0804092

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 4/9/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0804092	**Collection Date:**	4/8/2008 1:50:00 PM
Project:	San Juan Lateral Loop A	**Date Received:**	4/9/2008
Lab ID:	0804092-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **JAT**
1,2-Dibromoethane	ND	0.010		µg/L	1	4/11/2008 8:45:42 PM
Surr: 1,2,3-Trichloropropane	90.1	54.9-135		%REC	1	4/11/2008 8:45:42 PM
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	ND	1.0		µg/L	1	4/15/2008 2:39:56 PM
Aroclor 1221	ND	5.0		µg/L	1	4/15/2008 2:39:56 PM
Aroclor 1232	ND	1.0		µg/L	1	4/15/2008 2:39:56 PM
Aroclor 1242	ND	1.0		µg/L	1	4/15/2008 2:39:56 PM
Aroclor 1248	ND	1.0		µg/L	1	4/15/2008 2:39:56 PM
Aroclor 1254	ND	1.0		µg/L	1	4/15/2008 2:39:56 PM
Aroclor 1260	ND	1.0		µg/L	1	4/15/2008 2:39:56 PM
Surr: Decachlorobiphenyl	57.2	23.9-124		%REC	1	4/15/2008 2:39:56 PM
Surr: Tetrachloro-m-xylene	51.2	28.1-139		%REC	1	4/15/2008 2:39:56 PM
EPA METHOD 8310: PAHS						Analyst: **DMF**
Naphthalene	ND	2.0		µg/L	1	4/14/2008 10:24:07 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	4/14/2008 10:24:07 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	4/14/2008 10:24:07 PM
Acenaphthylene	ND	2.5		µg/L	1	4/14/2008 10:24:07 PM
Acenaphthene	ND	5.0		µg/L	1	4/14/2008 10:24:07 PM
Fluorene	ND	0.80		µg/L	1	4/14/2008 10:24:07 PM
Phenanthrene	ND	0.60		µg/L	1	4/14/2008 10:24:07 PM
Anthracene	ND	0.60		µg/L	1	4/14/2008 10:24:07 PM
Fluoranthene	ND	0.30		µg/L	1	4/14/2008 10:24:07 PM
Pyrene	ND	0.30		µg/L	1	4/14/2008 10:24:07 PM
Benz(a)anthracene	ND	0.070		µg/L	1	4/14/2008 10:24:07 PM
Chrysene	ND	0.20		µg/L	1	4/14/2008 10:24:07 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	4/14/2008 10:24:07 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	4/14/2008 10:24:07 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	4/14/2008 10:24:07 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	4/14/2008 10:24:07 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	4/14/2008 10:24:07 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	4/14/2008 10:24:07 PM
Surr: Benzo(e)pyrene	60.9	59.9-133		%REC	1	4/14/2008 10:24:07 PM
EPA METHOD 300.0: ANIONS						Analyst: **SLB**
Fluoride	0.16	0.10		mg/L	1	4/9/2008 10:47:41 AM
Chloride	3.3	0.10		mg/L	1	4/9/2008 10:47:41 AM
Nitrate (As N)+Nitrite (As N)	ND	0.20		mg/L	1	4/9/2008 10:47:41 AM
Sulfate	42	0.50		mg/L	1	4/9/2008 10:47:41 AM
EPA METHOD 7470: MERCURY						Analyst: **SNV**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0804092	**Collection Date:**	4/8/2008 1:50:00 PM
Project:	San Juan Lateral Loop A	**Date Received:**	4/9/2008
Lab ID:	0804092-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: SNV
Mercury	ND	0.0010		mg/L	5	4/15/2008 2:45:12 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: TES
Aluminum	ND	0.020		mg/L	1	4/9/2008 3:46:34 PM
Barium	0.026	0.020		mg/L	1	4/9/2008 3:46:34 PM
Boron	ND	0.040		mg/L	1	4/9/2008 3:46:34 PM
Cadmium	ND	0.0020		mg/L	1	4/9/2008 3:46:34 PM
Chromium	ND	0.0060		mg/L	1	4/14/2008 11:01:53 AM
Cobalt	ND	0.0060		mg/L	1	4/9/2008 3:46:34 PM
Copper	ND	0.0060		mg/L	1	4/9/2008 3:46:34 PM
Iron	ND	0.020		mg/L	1	4/9/2008 3:46:34 PM
Lead	ND	0.0050		mg/L	1	4/9/2008 3:46:34 PM
Manganese	0.23	0.0020		mg/L	1	4/9/2008 3:46:34 PM
Molybdenum	ND	0.0080		mg/L	1	4/9/2008 3:46:34 PM
Nickel	ND	0.010		mg/L	1	4/9/2008 3:46:34 PM
Silver	ND	0.0050		mg/L	1	4/9/2008 3:46:34 PM
Zinc	ND	0.050		mg/L	1	4/9/2008 3:46:34 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Toluene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Ethylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Naphthalene	ND	2.0		µg/L	1	4/16/2008 9:56:07 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2008 9:56:07 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2008 9:56:07 AM
Acetone	ND	10		µg/L	1	4/16/2008 9:56:07 AM
Bromobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Bromoform	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Bromomethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
2-Butanone	ND	10		µg/L	1	4/16/2008 9:56:07 AM
Carbon disulfide	ND	10		µg/L	1	4/16/2008 9:56:07 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Chlorobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Chloroethane	ND	2.0		µg/L	1	4/16/2008 9:56:07 AM
Chloroform	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Chloromethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0804092	**Collection Date:**	4/8/2008 1:50:00 PM
Project:	San Juan Lateral Loop A	**Date Received:**	4/9/2008
Lab ID:	0804092-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2008 9:56:07 AM
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Dibromomethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2008 9:56:07 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
2-Hexanone	ND	10		µg/L	1	4/16/2008 9:56:07 AM
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2008 9:56:07 AM
Methylene Chloride	ND	3.0		µg/L	1	4/16/2008 9:56:07 AM
n-Butylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Styrene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2008 9:56:07 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2008 9:56:07 AM
Vinyl chloride	ND	1.0		µg/L	1	4/16/2008 9:56:07 AM
Xylenes, Total	ND	1.5		µg/L	1	4/16/2008 9:56:07 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Hydrostatic Test Water
Lab Order:	0804092	**Collection Date:**	4/8/2008 1:50:00 PM
Project:	San Juan Lateral Loop A	**Date Received:**	4/9/2008
Lab ID:	0804092-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Surr: 1,2-Dichloroethane-d4	81.0	66.1-123		%REC	1	4/16/2008 9:56:07 AM
Surr: 4-Bromofluorobenzene	86.7	53.2-145		%REC	1	4/16/2008 9:56:07 AM
Surr: Dibromofluoromethane	82.2	66.5-119		%REC	1	4/16/2008 9:56:07 AM
Surr: Toluene-d8	84.0	64-131		%REC	1	4/16/2008 9:56:07 AM
EPA METHOD 9067: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	ND	2.5		µg/L	1	4/16/2008
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: TAF
Specific Conductance	250	0.010		µmhos/cm	1	4/11/2008
SM4500-H+B: PH						Analyst: SNV
pH	8.11	0.1		pH units	1	4/11/2008
SM 2540C: TDS						Analyst: TAF
Total Dissolved Solids	150	20		mg/L	1	4/11/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Trip Blank
Lab Order:	0804092	**Collection Date:**	4/9/2008
Project:	San Juan Lateral Loop A	**Date Received:**	4/9/2008
Lab ID:	0804092-02	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Toluene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Ethylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Naphthalene	ND	2.0		µg/L	1	4/16/2008 10:24:59 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2008 10:24:59 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2008 10:24:59 AM
Acetone	ND	10		µg/L	1	4/16/2008 10:24:59 AM
Bromobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Bromoform	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Bromomethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
2-Butanone	ND	10		µg/L	1	4/16/2008 10:24:59 AM
Carbon disulfide	ND	10		µg/L	1	4/16/2008 10:24:59 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Chlorobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Chloroethane	ND	2.0		µg/L	1	4/16/2008 10:24:59 AM
Chloroform	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Chloromethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2008 10:24:59 AM
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Dibromomethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2008 10:24:59 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
2-Hexanone	ND	10		µg/L	1	4/16/2008 10:24:59 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-08*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Trip Blank
Lab Order:	0804092	**Collection Date:**	4/9/2008
Project:	San Juan Lateral Loop A	**Date Received:**	4/9/2008
Lab ID:	0804092-02	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2008 10:24:59 AM
Methylene Chloride	ND	3.0		µg/L	1	4/16/2008 10:24:59 AM
n-Butylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Styrene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2008 10:24:59 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2008 10:24:59 AM
Vinyl chloride	ND	1.0		µg/L	1	4/16/2008 10:24:59 AM
Xylenes, Total	ND	1.5		µg/L	1	4/16/2008 10:24:59 AM
Surr: 1,2-Dichloroethane-d4	81.6	68.1-123		%REC	1	4/16/2008 10:24:59 AM
Surr: 4-Bromofluorobenzene	86.2	53.2-145		%REC	1	4/16/2008 10:24:59 AM
Surr: Dibromofluoromethane	80.9	68.5-119		%REC	1	4/16/2008 10:24:59 AM
Surr: Toluene-d8	82.8	64-131		%REC	1	4/16/2008 10:24:59 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

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800-735-4489 • 406-252-6325 • 406-252-6069 fax • eli@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0804092
Lab ID: B08041126-001
Client Sample ID: 0804092-01H-I, Hydrostatic Test Water

Report Date: 04/12/08
Collection Date: 04/08/08 13:50
DateReceived: 04/10/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	04/11/08 13:10 / kjp
METALS, DISSOLVED							
Arsenic	ND	mg/L		0.001		E200.8	04/10/08 23:15 / aje
Selenium	ND	mg/L		0.001		E200.8	04/10/08 23:15 / aje
Uranium	ND	mg/L		0.001		E200.8	04/10/08 23:15 / aje

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Hall Environmental
Project: 0804092

Report Date: 04/12/08
Work Order: B08041126

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_080410A	
Sample ID: QCS-ME080126B,071203	Initial Calibration Verification Standard								04/10/08 15:10
Arsenic	0.0500	mg/L	0.0050	100	90	110			
Selenium	0.0483	mg/L	0.0050	97	90	110			
Uranium	0.0198	mg/L	0.0010	99	90	110			
Method: E200.8									Batch: R109034
Sample ID: LRB	Method Blank				Run: ICPMS204-B_080410A				04/10/08 18:28
Arsenic	ND	mg/L	4E-05						
Selenium	ND	mg/L	0.0001						
Uranium	9E-06	mg/L	2E-06						
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS204-B_080410A				04/10/08 18:33
Arsenic	0.0516	mg/L	0.0050	103	85	115			
Selenium	0.0489	mg/L	0.0050	98	85	115			
Uranium	0.0520	mg/L	0.0010	104	85	115			
Sample ID: B08041111-009AMS	Sample Matrix Spike				Run: ICPMS204-B_080410A				04/10/08 22:48
Arsenic	0.0542	mg/L	0.0050	107	70	130			
Selenium	0.0538	mg/L	0.0050	107	70	130			
Uranium	0.0533	mg/L	0.0010	103	70	130			
Sample ID: B08041111-009AMSD	Sample Matrix Spike Duplicate				Run: ICPMS204-B_080410A				04/10/08 22:55
Arsenic	0.0548	mg/L	0.0050	109	70	130	1.2	20	
Selenium	0.0549	mg/L	0.0050	110	70	130	2.0	20	
Uranium	0.0536	mg/L	0.0010	103	70	130	0.6	20	

Qualifiers:
RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. • P.O. Box 30916 • 1120 South 27th Street • Billings, MT 59107-0916
800-735-4489 • 406-252-6325 • 406-252-6069 fax • eli@energylab.com

QA/QC Summary Report

Client: Hall Environmental
Project: 0804092

Report Date: 04/12/08
Work Order: B08041126

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada mod								Analytical Run: AUTOAN201-B_080411A	
Sample ID: ICV-1	Initial Calibration Verification Standard								04/11/08 12:37
Cyanide, Total	0.182	mg/L	0.0050	101	90	110			
Method: Kelada mod									Batch: R109056
Sample ID: LFB-4	Laboratory Fortified Blank				Run: AUTOAN201-B_080411A				04/11/08 12:42
Cyanide, Total	0.108	mg/L	0.0050	108	90	110			
Sample ID: MBLK-5	Method Blank				Run: AUTOAN201-B_080411A				04/11/08 12:44
Cyanide, Total	ND	mg/L	0.003						
Sample ID: B08041233-001CMS	Sample Matrix Spike				Run: AUTOAN201-B_080411A				04/11/08 13:22
Cyanide, Total	0.111	mg/L	0.0050	107	90	110			
Sample ID: B08041233-001CMSD	Sample Matrix Spike Duplicate				Run: AUTOAN201-B_080411A				04/11/08 13:24
Cyanide, Total	0.110	mg/L	0.0050	108	90	110			

Qualifiers:
RL - Analyte reporting limit.
ND - Not detected at the reporting limit.

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0804092

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	R28042	Analysis Date:	4/8/2008 9:38:02 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	R28042	Analysis Date:	4/8/2008 9:55:27 AM	
Fluoride	0.4855	mg/L	0.10	97.1	90	110			
Chloride	4.825	mg/L	0.10	96.5	90	110			
Nitrate (As N)+Nitrite (As N)	3.454	mg/L	0.20	98.7	90	110			
Sulfate	9.692	mg/L	0.50	96.9	90	110			
Method: EPA Method 9067: Total Phenolics									
Sample ID: MB-15663		*MBLK*			Batch ID:	15666	Analysis Date:	4/16/2008	
Phenolics, Total Recoverable	ND	µg/L	2.5						
Sample ID: LCS-15663		*LCS*			Batch ID:	15666	Analysis Date:	4/16/2008	
Phenolics, Total Recoverable	17.67	µg/L	2.5	88.3	51.7	133			
Sample ID: LCSD-15663		*LCSD*			Batch ID:	15666	Analysis Date:	4/16/2008	
Phenolics, Total Recoverable	18.29	µg/L	2.5	91.4	51.7	133	3.47	0	
Method: EPA Method 504.1: EDB									
Sample ID: MB-15627		*MBLK*			Batch ID:	15627	Analysis Date:	4/11/2008 6:26:40 PM	
1,2-Dibromoethane	ND	µg/L	0.010						
Sample ID: LCS-15627		*LCS*			Batch ID:	15627	Analysis Date:	4/11/2008 6:44:02 PM	
1,2-Dibromoethane	0.1030	µg/L	0.010	103	70	130			
Sample ID: LCSD-15627		*LCSD*			Batch ID:	15627	Analysis Date:	4/11/2008 7:01:33 PM	
1,2-Dibromoethane	0.1070	µg/L	0.010	107	70	130	3.81	13.6	
Method: EPA Method 8082: PCB's									
Sample ID: MB-15624		*MBLK*			Batch ID:	15624	Analysis Date:	4/15/2008 12:23:29 PM	
Aroclor 1016	ND	µg/L	1.0						
Aroclor 1221	ND	µg/L	5.0						
Aroclor 1232	ND	µg/L	1.0						
Aroclor 1242	ND	µg/L	1.0						
Aroclor 1248	ND	µg/L	1.0						
Aroclor 1254	ND	µg/L	1.0						
Aroclor 1260	ND	µg/L	1.0						
Sample ID: LCS-15624		*LCS*			Batch ID:	15624	Analysis Date:	4/15/2008 1:12:29 PM	
Aroclor 1016	3.064	µg/L	1.0	61.3	27.4	132			
Aroclor 1260	4.028	µg/L	1.0	80.6	47.6	119			
Sample ID: LCSD-15624		*LCSD*			Batch ID:	15624	Analysis Date:	4/15/2008 2:02:29 PM	
Aroclor 1016	3.360	µg/L	1.0	67.2	27.4	132	9.22	45.7	
Aroclor 1260	4.370	µg/L	1.0	87.4	47.6	119	8.19	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0804092

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 7470: Mercury									
Sample ID: MB-18646		*MBLK*			Batch ID:	18646	Analysis Date:	4/16/2008 1:59:14 PM	
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-18646		*LCS*			Batch ID:	18646	Analysis Date:	4/16/2008 2:00:59 PM	
Mercury	0.005116	mg/L	0.00020	102	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0804092

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: MB		*MBLK*			Batch ID:	R28035	Analysis Date:	4/9/2008 3:40:07 PM	
Aluminum	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Boron	ND	mg/L	0.040						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Cobalt	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Iron	ND	mg/L	0.020						
Lead	ND	mg/L	0.0050						
Manganese	ND	mg/L	0.0020						
Molybdenum	ND	mg/L	0.0080						
Nickel	ND	mg/L	0.010						
Silver	ND	mg/L	0.0050						
Zinc	ND	mg/L	0.050						
Sample ID: MB		*MBLK*			Batch ID:	R28080	Analysis Date:	4/14/2008 10:55:39 AM	
Aluminum	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Boron	ND	mg/L	0.040						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Cobalt	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Iron	ND	mg/L	0.020						
Lead	ND	mg/L	0.0050						
Manganese	ND	mg/L	0.0020						
Molybdenum	ND	mg/L	0.0080						
Nickel	ND	mg/L	0.010						
Silver	ND	mg/L	0.0050						
Zinc	ND	mg/L	0.050						
Sample ID: LCS		*LCS*			Batch ID:	R28035	Analysis Date:	4/9/2008 3:43:20 PM	
Aluminum	0.4979	mg/L	0.020	99.6	80	120			
Barium	0.4880	mg/L	0.020	97.6	80	120			
Boron	0.4958	mg/L	0.040	99.2	80	120			
Cadmium	0.4952	mg/L	0.0020	99.0	80	120			
Chromium	ND	mg/L	0.0060	0	80	120			S
Cobalt	0.4684	mg/L	0.0060	93.7	80	120			
Copper	0.4824	mg/L	0.0060	96.5	80	120			
Iron	0.4858	mg/L	0.020	97.2	80	120			
Lead	0.4851	mg/L	0.0050	97.0	80	120			
Manganese	0.4849	mg/L	0.0020	97.0	80	120			
Molybdenum	0.5022	mg/L	0.0080	100	80	120			
Nickel	0.4700	mg/L	0.010	94.0	80	120			
Silver	0.4987	mg/L	0.0050	99.7	80	120			
Zinc	0.4981	mg/L	0.050	99.6	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0804092

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: LCS		*LCS*			Batch ID:	R26080	Analysis Date:	4/14/2008 10:58:40 AM	
Aluminum	0.5205	mg/L	0.020	104	80	120			
Barium	0.5143	mg/L	0.020	103	80	120			
Boron	0.5202	mg/L	0.040	104	80	120			
Cadmium	0.5230	mg/L	0.0020	105	80	120			
Chromium	0.5167	mg/L	0.0060	103	80	120			
Cobalt	0.5057	mg/L	0.0060	101	80	120			
Copper	0.5142	mg/L	0.0060	103	80	120			
Iron	0.5088	mg/L	0.020	101	80	120			
Lead	0.5075	mg/L	0.0060	101	80	120			
Manganese	0.5124	mg/L	0.0020	102	80	120			
Molybdenum	0.5340	mg/L	0.0080	107	80	120			
Nickel	0.4851	mg/L	0.010	97.0	80	120			
Silver	0.5300	mg/L	0.0050	106	80	120			
Zinc	0.5127	mg/L	0.050	103	80	120			
Method: SM 2540C: TDS									
Sample ID: MB-15621		*MBLK*			Batch ID:	15621	Analysis Date:	4/11/2008	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-15621		*LCS*			Batch ID:	15621	Analysis Date:	4/11/2008	
Total Dissolved Solids	1020	mg/L	20	101	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0804092

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			**Batch ID: R28114**		**Analysis Date: 4/15/2008 12:27:12 PM**		
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: San Juan Lateral Loop A **Work Order:** 0804092

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	R28114	Analysis Date:	4/15/2008 12:27:12 PM	
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R28114	Analysis Date:	4/15/2008 1:24:55 PM	
Benzene	19.32	µg/L	1.0	96.6	72.4	126			
Toluene	17.48	µg/L	1.0	85.3	69.4	126			
Chlorobenzene	20.37	µg/L	1.0	102	83.1	111			
1,1-Dichloroethene	21.37	µg/L	1.0	107	81.4	122			
Trichloroethene (TCE)	18.10	µg/L	1.0	90.5	84.4	118			

Qualifiers:

B	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL | Date Received: 4/9/2008

Work Order Number 0804092 | Received by: AT

Checklist completed by: _____ Signature | 4/9/08 Date | Sample ID labels checked by AT Initials

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	2°	<6° C *Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Arions Environment Services

Address: 1024 E. Comanche St.
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush

Project Name: San Juan Lateral Loop A

Project #: Transwestern Pipeline

Project Manager: Ross Kennemer

Sampler: Chad Dawson

[redacted]

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0804092	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Nitrate	Diss. Metals (see list)	Total Mercury	Total Cyanide	Phenols	Air Bubbles (Y or N)
4-8-08	1350	Hydrostatic Test Water	14 (mixed)	HCl, HNO3, NaOH, H2SO4	-1					X			X	X	X	X	X	X	X	X	X	
		Trip Blank	1 x VOA		-2																	

Date:	Time:	Relinquished by:	Received by:
4-8-08	1710	Chad D AES	4/9/08 0850
Date:	Time:	Relinquished by:	Received by:

Remarks:
*Note: Sample parameters and methods are pursuant to NMAC 20.6.2.3103-A, B, & C. Refer to HEAL No: 0801276-1
*Radiologicals have been excluded.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Williams Field Service

2. Originating Site:
SEE ATTACHED LIST

3. Location of Material (Street Address, City, State or ULSTR):
SEE LIST

4. Source and Description of Waste:
Compressor Containment waste water; Rain + City waters mixed with very small Amounts of oil + TEG
(1600 bbls monthly)

Estimated Volume _____ yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Charlie Price, representative or authorized agent for Williams Field Service do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☑ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☑ MSDS Information ☑ RCRA Hazardous Waste Analysis ☑ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
HydroPure Technology INC.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #:

Address of Facility: ~~#345- CR.350 AZTEC, NM.~~

Method of Treatment and/or Disposal:

☑ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: SUPERVISOR DATE: 4-18-08

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186

Surface Waste Management Facility Authorized Agent

CDP Description	Water Type	Section	Township	Range	Cost Center
32-7 CDP PRODUCED	Produced	34	32N	7W	40941
32-7 CDP WASTEWATER	Waste Water	34	32N	7W	40941
32-8 #2 CDP POTABLE	Potable	27	32N	8W	40941
32-8 #2 CDP PRODUCED	Produced	27	32N	8W	40941
32-8 #2 CDP WASTEWATER	Waste Water	27	32N	8W	40941
32-8 #3 CDP PRODUCED	Produced	9	31N	8W	40941
32-8 #3 WASTEWATER	Waste Water	9	31N	8W	40941
AZTEC CDP PRODUCED	Produced	8	32N	10W	40941
AZTEC CDP WASTEWATER	Waste Water	8	32N	10W	40941
CARRACAS CDP PRODUCED	Produced	34	32N	5W	40941
CARRACAS CDP WASTEWATER	Waste Water	34	32N	5W	40941
CEDAR HILL CDP PRODUCED	Produced	28	32N	10W	41031
CEDAR HILL CDP WASTEWATER	Waste Water	28	32N	10W	41031
DECKER JUNCTION CDP POTABLE WATER	Potable	19	32N	10W	40941
DECKER JUNCTION CDP PRODUCED	Produced	19	32N	10W	40941
DECKER JUNCTION CDP WASTEWATER	Waste Water	19	32N	10W	40941
MIDDLE MESA COMP. STATION PRODUCED	Produced	10	31N	7W	40941
MIDDLE MESA COMP. STATION WASTEWATER	Waste Water	10	31N	7W	40941
N-30 CDP PRODUCED	Produced	25	32N	9W	40941
N-30 CDP WASTE WATER	Waste Water				40941
N-30 POTABLE / DI WATER	Potable				40941
PLA-9 CDP PRODUCED	Produced	22	32N	10W	40941
PLA-9 CDP WASTEWATER	Waste Water	22	32N	10W	40941
PUMP MESA CDP POTABLE	Potable	14	31N	8W	40941
PUMP MESA CDP PRODUCED	Produced	14	31N	8W	40941
PUMP MESA CDP WASTEWATER	Waste Water	14	31N	8W	40941
ROSA #1 COMP. STATION PRODUCED	Produced	7	31N	6W	40941
ROSA #1 COMP. STATION WASTEWATER	Waste Water	7	31N	6W	40941
TRUNK N COMP. STATION PRODUCED	Produced	17	32N	7W	40941
TRUNK N COMP. STATION	Waste				

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Williams Field Service	Project #:	00068-005
Sample ID:	32 - 7 CDP	Date Reported:	03-20-08
Laboratory Number:	44582	Date Sampled:	03-18-08
Chain of Custody:	4045	Date Received:	03-18-08
Sample Matrix:	Water	Date Analyzed:	03-20-08
Preservative:	HNO3	Date Digested:	03-18-08
Condition:	Cool and Intact	Analysis Needed:	Total RCRA Metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	TCLP Regulatory Level (mg/L)
Arsenic	**0.004**	**0.001**	**5.0**
Barium	**0.134**	**0.001**	**100**
Cadmium	**0.003**	**0.001**	**1.0**
Chromium	**0.002**	**0.001**	**5.0**
Lead	**ND**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.281**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **32 - 7 CDP Used Water.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS
Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	03-20-TM QA/QC	Date Reported:	03-20-08
Laboratory Number:	44529	Date Sampled:	N/A
Sample Matrix:	Liquid	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	03-20-08
Condition:	Cool & Intact	Date Digested:	03-18-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.006	0.006	0.0%	0% - 30%
Barium	ND	ND	0.001	0.075	0.079	5.3%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.103	0.103	0.0%	0% - 30%
Lead	ND	ND	0.001	0.028	0.028	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.008	0.008	0.0%	0% - 30%
Silver	ND	ND	0.001	0.002	0.002	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.250	0.006	0.291	114%	80% - 120%
Barium	0.500	0.075	0.6	101%	80% - 120%
Cadmium	0.250	ND	0.269	108%	80% - 120%
Chromium	0.500	0.103	0.60	100%	80% - 120%
Lead	0.500	0.028	0.53	99.9%	80% - 120%
Mercury	0.100	ND	0.099	99.0%	80% - 120%
Selenium	0.100	0.008	0.107	99.1%	80% - 120%
Silver	0.100	0.002	0.109	107%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 44529 and 44582.**

Analyst

Review

CHAIN OF CUSTODY RECORD

4045

Client: WFS	Project Name / Location: 32-7 CDP USED WATER
Client Address: (970) 385-3891 Fax: Larry Jones	Sampler Name: M. TALOVICH / AGENT FOR WFS
Client Phone No.: David Bays (Hard Copy)	Client No.: 00068-005

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)					Sample Cool	Sample Intact
32-7 CDP	3/18/08	0900	44582	H2O	1 - 250ml plastic		✓				✓										✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	3/18/08	11:43	Christine M Walker	3/18/08	11:45
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, New Mexico 87401 • (505) 632-0615

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Enterprise Field Services, LLC, 614 Reilly Ave., Farmington, NM 87401

2. Originating Site:
Blanco-Fruitland 16" pipeline, San Juan County, NM

3. Location of Material (Street Address, City, State or ULSTR):
Sec 14, T29N, R11W, San Juan, NM

4. Source and Description of Waste:

Pipeline pigging waste from pigging of Blanco-Fruitland 16" line.

Estimated Volume _____ yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, **Runell Seale** 6-9-08, representative or authorized agent for **Enterprise Field Services, LLC** do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency X Monthly ☐ Weekly ☐ Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☒ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Key Energy or unknown transporter

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Key Evap Pond and Landfarm #NM-01-0009**

Address of Facility: **345 CR 350, Farmington, NM 87401**

Method of Treatment and/or Disposal:

☒ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Steve Wilson TITLE: Supervisor DATE: 06-10-08

SIGNATURE: Steve Wilson TELEPHONE NO.: 505-334-6186

Surface Waste Management Facility Authorized Agent

Enterprise Project Description:Blanco/Fruitland 16" x 22.7 Miles
Enterprise Work Release #:
N-SPEC Project Number: #28-9864
N-SPEC Project Charges Through:
N-SPEC Cleaning Runs Proposed:Six On-Line

N-SPEC

Tier I Discount on Crew/Equipment (7%), 10% on N-SPEC Products & 5% on Cleaning Pigs

N-SPEC PRODUCTS			
Qty:	DESCRIPTION:	Rate	Units
0	N-SPEC 304 (Inhibitor)	9.00	Gallon
10	N-SPEC 9010F (Defoamer)	17.68	Gallon
0	N-SPEC 333-D (Corrsion Inhibitor)	6.60	Gallon
0	N-SPEC 372C	9.45	Gallon
0	N-SPEC TC25	9.70	Gallon
0	N-SPEC 403	17.98	Gallon
0	N-SCRUB GEL	3.46	Gallon
0	N-SPEC GS40	12.04	Gallon
0	N-SPEC GS 120 (Pipeline cleaner)	12.04	Gallon
0	N-SPEC 120	20.88	Gallon
750	N-SPEC 105 (Pipeline cleaner)	18.18	Gallon
225	N-SPEC 50	16.06	Gallon
985			

DILUENTS			
QUANTITY:	DESCRIPTION:	Rate	Units
0	WATER	$ 0.35	per gallon
0	METHANOL	$ 3.42	per gallon
8450	DIESEL RED DYED TYPE (Rack + .10 * 15%)Estimated	$ 3.75	per gallon

Ralph Morris, PE
Project Manager - Farmington
505-599-2108 Office
505-947-9444 Cell

177 Bbls. Fluid
~~to Safety Kleen~~

Diesel
Now FCC/
Siemens Water
Technologies

Fluid
To Key Energy
Disposal

Solids
To Envirotech
Land Farm

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	Defoamer 9010-F	Code	Not available.
Supplier	Coastal Fluid Technologies A Division of Coastal Chemical Co., L.L.C. 3520 Veterans Memorial Drive Abbeville, LA 70511 337-893-1962	MSDS#	Not available
		Validation Date	05/24/2004
		Print Date	05/24/2004
Synonym	Not available.	In case of Emergency	TRANSPORTATION EMERGENCY: Chemtrec 1-800-424-9300
Trade name	Not available.		
Material Uses	Not available.		
Manufacturer	Coastal Fluid Technologies A Division of Coastal Chemical Co., L.L.C. 3520 Veterans Memorial Drive Abbeville, LA 70511 337-893-1962		

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC_{50}/LD_{50}
No hazardous ingredient.				

Section 3. Hazards Identification

Emergency Overview

No specific hazard.

MAY CAUSE EYE IRRITATION.

Routes of Entry

NONE

Potential Acute Health Effects

Non-irritant for skin. Non-sensitizer for skin. Non-permeator by skin. This product may irritate eyes upon contact.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact

IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.

Skin Contact

NO known EFFECT on skin contact, rinse with water for a few minutes.

Hazardous Skin Contact

No additional information.

Inhalation

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Hazardous Inhalation

No additional information.

Continued on Next Page

Ingestion	Rinse mouth with water.
Hazardous Ingestion	No additional information.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Non-flammable in presence of open flames and sparks, of heat, of oxidizing materials, of reducing materials, of combustible materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	No additional remark.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Our database contains no additional information in case of a spill and/or a leak of the product. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Handling	Not available.
Storage	Store in an appropriate container.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
No hazardous ingredients.		

Continued on Next Page

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.
Molecular Weight	Not applicable.
pH (1% soln/water)	Neutral.
Boiling Point	The lowest known value is 100°C (212°F) (Water).
Melting Point/Pour Point at C	May start to solidify at 0°C (32°F) based on data for: Water.
Critical Temperature	Not available.
Specific Gravity	Weighted average: 1 (Water = 1)
Vapor Pressure	The highest known value is 17.2 mm of Hg (@ 20°C) (Water).
Vapor Density	The highest known value is 1 (Air = 1) (Water). Weighted average: 1 (Air = 1)
Volatility	Not available.
Odor Threshold	Not available.
Evaporation rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol.
Solubility	Easily soluble in cold water, hot water, methanol.
Physical Chemical Comments	Not available.

Odor	Not available.
Taste	Not available.
Color	Light.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	Non-reactive with organic materials, metals.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Not considered to be dangerous for humans according to our data base.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Continued on Next Page

Special Remarks on other Toxic Effects on Humans	No additional remark.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Disposal	Dispose of according to local, state and federal regulations.

Section 14. Transport Information

Propper Shipping Name	Not applicable.
DOT Classification	Not a DOT controlled material (United States)
DOT Identification Number	Not applicable.
Packing Group	Not applicable.
Hazardous Substances Reportable Quantity (kg)	Not available.
Special Provisions for Transport	Not applicable.

Section 15. Regulatory Information

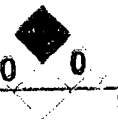
Federal and State Regulations	Pennsylvania RTK: **Siloxanes et silicones, di-me**; New Jersey: **Siloxanes et silicones, di-me**; TSCA inventory: **Water**;	
Other Classifications	**WHMIS (Canada)**	Not controlled under WHMIS (Canada)
	DSCL (EEC)	Not controlled under DSCL (Europe).

Section 16. Other Information

HMIS (U.S.A.)

Health Hazard	0
Fire Hazard	0
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)



References	Not available.
Other Special Considerations	No additional remark.

Continued on Next Page

Validated by Charles Toups on 05/24/2004.	Verified by Charles Toups. Printed 05/24/2004.

Emegency Contact

Chemtrec 1-800-424-9300

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**N-SPEC 50**
Supplier	**Coastal Fluid Technologies** **A Division of Coastal Chemical Co., L.L.C.** **3520 Veterans Memorial Drive Abbeville, LA 70511** **318-893-1952**
Synonym	Not available.
Trade name	Not available.
Material Uses	Not available.
Manufacturer	**Coastal Fluid Technologies** **A Division of Coastal Chemical Co., L.L.C.** **3520 Veterans Memorial Drive Abbeville, LA 70511** **318-893-1952**

Code	Not available.
MSDS#	Not available.
Validation Date	07/29/1998
Print Date	06/02/2000

In case of Emergency

TRANSPORTATION EMERGENCY:
Chemtrec
1-800-424-9300

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC_{50}/LD_{50}
No hazardous ingredient.				

Section 3. Hazards Identification

Emergency Overview

WARNING!

MAY CAUSE MILD EYE IRRITATION.

Routes of Entry

NONE

Potential Acute Health Effects

No specific information is available in our database regarding the acute toxic effects of this material for humans.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact

NO known EFFECT on eye contact, rinse with water for a few minutes.

Skin Contact

NO known EFFECT on skin contact, rinse with water for a few minutes.

Hazardous Skin Contact

No additional information.

Inhalation

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Hazardous Inhalation

No additional information.

Continued on Next Page

Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Hazardous Ingestion	No additional information.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	CLOSED CUP: 204.44°C (400°F). (Pensky-Martens.).
Flammable Limits	Not available.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	No specific information is available in our database regarding the flammability of this product in presence of various materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO_2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	No additional remark.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	Our database contains no additional information in case of a spill and/or a leak of the product. Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Section 7. Handling and Storage

Handling	Not available.
Storage	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
No hazardous ingredients.		

Continued on Next Page

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Not available.
Molecular Weight	Not applicable.	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Amber. (Light.)
Boiling Point	Not available.		
Melting Point/Pour Point oC	Not available.		
Critical Temperature	Not available.		
Specific Gravity	0.87 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Evaporation rate	Not available.		
Viscosity	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in cold water, hot water.		
Physical Chemical Comments	Not available.		

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	No specific information is available in our database regarding the reactivity of this material in presence of various other materials.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	No specific information is available in our database regarding the other toxic effects of this material for humans.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Continued on Next Page

Special Remarks on other Toxic Effects on Humans	No additional remark.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Disposal	Follow local, state and federal guide lines.

Section 14. Transport Information

Propper Shipping Name	Not applicable.
DOT Classification	Not a DOT controlled material (United States).
DOT Identification Number	Not applicable.
Packing Group	Not applicable.
Hazardous Substances Reportable Quantity (kg)	Not available.
Special Provisions for Transport	Not applicable.

Section 15. Regulatory Information

Federal and State Regulations	TSCA inventory: **Proprietary**;	
Other Classifications	WHMIS (Canada)	Not controlled under WHMIS (Canada).
	DSCL (EEC)	Not controlled under DSCL (Europe).

Section 16. Other Information

HMIS (U.S.A.)

Health	0
Fire Hazard	1
Reactivity	0
Personal Protection	a

National Fire Protection Association (U.S.A.)

References	Not available.
Other Special Considerations	No additional remark.

Continued on Next Page

Validated by Joe Hudman on 07/29/1998.	Verified by Coastal Chemical Co., L.L.C..
	Printed 06/02/2000.

Emegency Contact

Chemtrec 1-800-424-9300

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**NSPEC 105 Cleaner**	Code	Not available.
Supplier	Coastal Chemical Co., L.L.C 3520 Veterans Memorial Drive Abbeville, La. 70510 318-893-3862	MSDS#	Not available
		Validation Date	4/14/2000
Synonym	Not available.	Print Date	4/14/2000
Trade name	Not available	Responsible Name	Joe Hudman
Material Uses	Not available	In Case of Emergency	Transportation Emergency Call CHEMTREC 800-424-9300 Other Information Call Joe Hudman 713-477-6675
Manufacturer	Coastal Chemical Co., L.L.C 3520 Veterans Memorial Drive Abbeville, La. 70510 318-893-3862		

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
1) Alkylaryl sulfonate amine salt		Conf.	

Section 3. Hazards Identification

Physical State and Appearance	Liquid.
Emergency Overview	WARNING! CAUSES SEVERE EYE IRRITATION. MAY CAUSE SKIN IRRITATION Avoid contact with eyes, skin and clothing. Wash thoroughly after handling
Routes of Entry	Eye contact. Ingestion Skin Contact
Potential Acute Health Effects	
Eyes	Very hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.
Skin	Sensitization of the product: Not available. Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering
Inhalation	Hazardous in case of inhalation
Ingestion	Hazardous in case of ingestion
Potential Chronic Health Effects	**CARCINOGENIC EFFECTS**: Not available. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available
Medical Conditions Aggravated by Overexposure:	Repeated or prolonged exposure is not known to aggravate medical condition
Overexposure /Signs/Symptoms	Not available.
See Toxicological Information (section 11)	

Continued on Next Page

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Seek medical attention.
Skin Contact	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	May be combustible at high temperature.
Auto-ignition Temperature	Not available.
Flash Points	CLOSED CUP: >148.89°C (300°F).
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2 ...), sulfur oxides (SO2, SO3...).
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames and sparks, of oxidizing materials. Slightly flammable to flammable in presence of heat, of reducing materials. Non-flammable in presence of moisture.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	When heated to decomposition, it emits toxics fumes.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill and Leak	The concentrated form of this material is a cleaner. During application, hazardous material on the apparatus or structure being cleaned may become part of the cleaning solution. Check with all applicable regulations before disposing of the material created during application.
Large Spill and Leak	The concentrated form of this material is a cleaner. During application, hazardous material on the apparatus or structure being cleaned may become part of the cleaning solution. Check with all applicable regulations before disposing of the material created during application.

Continued on Next Page

Section 7. Handling and Storage

Handling	Not available.
Storage	Keep container tightly closed in a cool, well-ventilated place

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	
Eyes	Safety glasses.
Body	Lab coat
Respiratory	Not applicable.
Hands	Gloves (impervious)
Feet	Not applicable
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product

Product Name	Exposure Limits
1) Alkylaryl sulfonate amine salt	

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.
pH (1% Soln/Water)	7 to 8 [Basic.]
Boiling/Condensation Point	Not available.
Melting/Freezing Point	Not available
Critical Temperature	Not available.
Specific Gravity	0.86 (Water = 1)
Vapor Pressure	Not available.
Vapor Density	Not available.
Volatility	Not available.
Odor Threshold	Not available.
Evaporation Rate	Not available.
VOC	Not available.
Viscosity	Not available.

Odor	Slight.
Taste	Not available.
Color	Brown. (Dark.)

Continued on Next Page

$LogK_{ow}$	The product is much more soluble in water.
Ionicity (in Water)	Anionic. (Alkylaryl sulfonate amine salt).
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether. Insoluble in n-octanol.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable
Conditions of Instability	No additional remark
Incompatibility with Various Substances	Reactive with oxidizing agents, acids Slightly reactive to reactive with reducing agents
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	No.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	The substance is toxic to upper respiratory tract, eyes.
Other Toxic Effects on Humans	Very hazardous in case of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (sensitizer)
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on Other Toxic Effects on Humans	No additional remark.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Biodegradable/OECD	Not available.
Mobility	Not available
	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	No additional remark

Continued on Next Page

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations
Waste Stream	Not available.

Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification	DOT CLASS 9: Miscellaneous hazardous material. Marine pollutant RQ. Environmentally hazardous substances, liquid, n.o.s., 9., UN3082, III
Reportable Quantity	1611.8
Marine Pollutant	DOT Class: Marine Pollutant (Pollutant.)
Special Provisions for Transport	Contains Alkylbenzenesulfonate

Section 15. Regulatory Information

HCS Classification	CLASS: Target organ effects.
U.S. Federal Regulations	TSCA 8(a) PAIR: Diethanolamine TSCA 8(b) inventory: Diethanolamine; Alkylaryl sulfonate amine salt; Fatty Methyl Esters SARA 302/304/311/312 extremely hazardous substances: None SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. Clean water act (CWA) 307: No products were found Clean water act (CWA) 311: No products were found Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
International Regulations	
EINECS	Not available.
DSCL (EEC)	R36- Irritating to eyes.
International Lists	No products were found.
State Regulations	Pennsylvania RTK: Diethanolamine; Propylene Glycol Florida: Diethanolamine Minnesota: Diethanolamine; Propylene Glycol Massachusetts RTK: Diethanolamine California prop. 65: No products were found.

Continued on Next Page

Section 16. Other Information

Label Requirements	CAUSES SEVERE EYE IRRITATION. MAY CAUSE SKIN IRRITATION

Hazardous Material Information System (U.S.A.)

Health	* 1
Fire Hazard	1
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)

References	Not available.
Other Special Considerations	No additional remark

Validated by Joe Hudman on 4/14/2000.

Verified by Joe Hudman.

Printed 4/14/2000.

Transportation Emergency Call
CHEMTREC 800-424-9300
Other Information Call
Joe Hudman
713-477-6675

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**Diesel Fuel High Sulphur**	Code	Not available.
Supplier	Coastal Chemical Co., L.L.C. 3520 Veterans Memorial Drive Abbeville, La. 70510 337-893-3862	MSDS#	Not available.
		Validation Date	05/24/04
Synonym	Not available	Print Date	05/24/04
Trade name	Not available.	Responsible Name	Charles Toups
Material Uses	Not available.	In Case of Emergency	Transportation Emergency Call CHEMTREC 800-424-9300 Other Information Call Charles Toups 337-261-0786
Manufacturer	VARIOUS		

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
1) Diesel fuel	68334-30-5	100	Not available.

Section 3. Hazards Identification

Physical State and Appearance	Liquid.
Emergency Overview	DANGER! COMBUSTIBLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties. Risk of cancer depends on duration and level of exposure. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation.
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Potential Acute Health Effects	
Eyes	This product is an eye irritant.
Skin	Irritant. This product may irritate eyes and skin upon contact. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.
Inhalation	Irritant. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum. Moderately irritating to the respiratory system.
Ingestion	Aspiration hazard if swallowed- can enter lungs and cause damage. Harmful if swallowed.
Potential Chronic Health Effects	**CARCINOGENIC EFFECTS**: Classified 2B (Possible for human.) by IARC [Diesel fuel]. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available
Medical Conditions Aggravated by Overexposure:	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
Overexposure /Signs/Symptoms	Not available.
See Toxicological Information (section 11)	

Continued on Next Page

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Flammable.
Auto-ignition Temperature	210 to 260°C (410 to 500°F)
Flash Points	CLOSED CUP: 60°C (140°F).
Flammable Limits	Not available.
Products of Combustion	Carbon oxides (CO, CO2)
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames and sparks, of heat, of oxidizing materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Flammable liquid, insoluble in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	Combustible when exposed to heat or flame. Container explosion may occur under fire conditions or when heated.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill and Leak	Flammable liquid, insoluble in water Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Continued on Next Page

Section 7. Handling and Storage

Handling	Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment
Storage	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	
Eyes	Safety glasses.
Body	Lab coat.
Respiratory	Wear appropriate respirator when ventilation is inadequate.
Hands	Gloves: Protective gloves should be worn under normal conditions of use.
Feet	Not applicable.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name	Exposure Limits
1) Diesel fuel	Not available

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.
pH (1% Soln/Water)	6.5 to 7.5 [Neutral.]
Boiling/Condensation Point	160 to 287.78°C (320 to 550°F)
Melting/Freezing Point	Not available.
Critical Temperature	Not available.
Specific Gravity	0.81to 0.88 (Water = 1)
Vapor Pressure	<6.7 kPa (@ 20°C)
Vapor Density	Not available.
Volatility	100% (v/v).
Odor Threshold	Not available.
Evaporation Rate	Not available.

Odor	Hydrocarbon.
Taste	Not available.
Color	Clear Liquid

Continued on Next Page

VOC	100 (%)
Viscosity	Not available.
$LogK_{ow}$	Not available.
Ionicity (in Water)	Not available.
Dispersion Properties	Not available.
Solubility	Insoluble in cold water.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Not available.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 7500 mg/kg (Rat) (Calculated value for the mixture).
Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: Classified 2B (Possible for human.) by IARC [Diesel fuel].
Other Toxic Effects on Humans	No specific information is available in our database regarding the other toxic effects of this material for humans.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Biodegradable/OECD	Not available.
Mobility	Not available.
	Possibly hazardous short/long term degradation products are to be expected.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	Not available.

Continued on Next Page

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.

Consult your local or regional authorities.

Section 14. Transport Information

Shipping Description	CLASS 3: Combustible liquid Diesel Fuel, 3 , NA1993, III
Reportable Quantity	Not available.
Marine Pollutant	Not available.
Special Provisions for Transport	Not available.

Section 15. Regulatory Information

HCS Classification	CLASS: Irritating substance. CLASS: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).
U.S. Federal Regulations	TSCA 8(b) inventory: Diesel fuel SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. SARA 313 toxic chemical notification and release reporting: No products were found. Clean water act (CWA) 307: No products were found. Clean water act (CWA) 311: No products were found. Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
International Regulations	
EINECS	Not available.
DSCL (EEC)	R40- Possible risks of irreversible effects.
International Lists	No products were found.
State Regulations	Pennsylvania RTK: Diesel fuel California prop. 65: No products were found.

Continued on Next Page

Section 16. Other Information

Label Requirements	COMBUSTIBLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	2
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)

References	Not available.
Other Special Considerations	Not available.

Validated by Charles Toups on 05/24/04.

Verified by Charles Toups.

Printed 05/24/04.

Transportation Emergency Call
CHEMTREC 800-424-9300
Other Information Call
Charles Toups
337-261-0796

Notice to Reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC

2. **Originating Site:**
Enterprise Cathodic Protection Well CPS 1989

3. **Location of Material (Street Address, City, State or ULSTR):**

Section 13, Township 29N and Range 10W San Juan County, New Mexico

4. **Source and Description of Waste:**
Low pH groundwater being produced from Artesian well at the CPS 1989. Origin of low pH water is unknown at this time. Currently, water is being neutralized with soda ash for disposal based on the approval from the NMOCD.

Estimated Volume 120 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, David R. Smith, representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☒ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Rock Springs Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Disposal Systems Well # 1 UIC-CLI-005

Address of Facility: 345 CR 350 Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Steve Wilson TITLE: _____ DATE: 12-14-08

SIGNATURE: Steve Wilson TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent

5796 U.S Highway 64
Farmington, NM 87401
(505) 632-0615
(505) 632-1865 fax

Envirotech

Fax

To:	H.C. Puttman	**From:**	Envirotech, Inc.
Fax:	505-566-5389	**Pages:**	20
Phone:	505-327-0416	**Date:**	12/16/08
Re:	C-138	**cc:**	

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

Comments:

If you have any questions or require additional information, please contact our office at (505) 632-0615.

envirotech
Analytical Laboratory

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Tank 1 & 2	Date Reported:	12-12-08
Laboratory Number:	48479	Date Sampled:	12-11-08
Chain of Custody:	5912	Date Received:	12-11-08
Sample Matrix:	Aqueous	Date Extracted:	12-12-08
Preservative:	Cool	Date Analyzed:	12-12-08
Condition:	Intact		

Parameter	Analytical Result	Units
pH	**7.33**	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **CPS 1989.**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

5912

Client: Enterprise	Project Name / Location: CPS 1989	ANALYSIS / PARAMETERS
Client Address:	Sampler Name: G. Crabtree	
Client Phone No.:	Client No.: 97057-0222	

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl₂	Preservative HCl	Preservative Cool	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	pH			Sample Cool	Sample Intact
Tank 1+2	12/11/08	1410	48479	Soil Solid Sludge [✓ Aqueous]	1-125ml			✓											✓			✓	✓
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
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				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	12/11/08	1450	Kendall Augustine	12/11/08	1450
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505-632-0615

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Hose	Date Reported:	06-10-08
Chain of Custody:	4522	Date Sampled:	06-03-08
Laboratory Number:	45743	Date Received:	06-03-08
Sample Matrix:	Liquid	Date Analyzed:	06-05-08
Preservative:		Analysis Requested:	8260 VOC
Condition:	Intact		

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client: Enterprise
Sample ID: Hose
Laboratory Number: 45743

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	3.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	91.7	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	102	% Recovery	74.6-123	1
Toluene-d8	88.9	% Recovery	84.2-115	1
4-Bromofluorobenzene	84.9	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260, Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Comments: **Drums.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	06-10-08
Laboratory Number:	06-05 VOA	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-05-08
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Laboratory Blank
Laboratory Number: 06-05 VOA

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	1.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	102	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	99.2	% Recovery	74.6-123	1
Toluene-d8	115	% Recovery	84.2-115	1
4-Bromofluorobenzene	113	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: ~~QA/QC for Samples 45643 - 45647 and 45743.~~

Analyst

Review

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Daily Calibration Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Daily Calibration	Date Reported:	06-10-08
Laboratory Number:	06-06 QA/QC	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-05-08
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
Benzene	100	106	106	80 - 120
Toluene	100	100	100	80 - 120
Ethylbenzene	100	101	101	80 - 120
Xylenes, Total	100	105	105	80 - 120
Methyl tert-butyl ether (MTBE)	100	97.5	97.5	80 - 120
1,2,4-Trimethylbenzene	100	101	101	80 - 120
1,3,5-Trimethylbenzene	100	110	110	80 - 120
1,2-Dichloroethane (EDC)	100	1096	1096	80 - 120
1,2-Dibromoethane (EDB)	100	115	115	80 - 120
Naphthalene	100	98.5	98.5	80 - 120
1-Methylnaphthalene	100	88.5	88.5	80 - 120
2-Methylnaphthalene	100	99.3	99.3	80 - 120
Bromobenzene	100	101	101	80 - 120
Bromochloromethane	100	105	105	80 - 120
Bromodichloromethane	100	118	118	80 - 120
Bromoform	100	101	101	80 - 120
Bromomethane	100	95.6	95.6	80 - 120
Carbon Tetrachloride	100	103	103	80 - 120
Chlorobenzene	100	101	101	80 - 120
Chloroethane	100	97.6	97.6	80 - 120
Chloroform	100	102	102	80 - 120
Chloromethane	100	96.4	96.4	80 - 120
2-Chlorotoluene	100	101	101	80 - 120
4-Chlorotoluene	100	118	118	80 - 120
cis-1,2-Dichloroethene	100	114	114	80 - 120
cis-1,3-Dichloropropene	100	110	110	80 - 120
1,2-Dibromo-3-chloropropane	100	95.6	95.6	80 - 120
Dibromochloromethane	100	104	104	80 - 120
Dibromoethane	100	110	110	80 - 120
1,2-Dichlorobenzene	100	98.4	98.4	80 - 120
1,3-Dichlorobenzene	100	110	110	80 - 120
1,4-Dichlorobenzene	100	109	109	80 - 120
Dichlorodifluoromethane	100	118	118	80 - 120
1,1-Dichloroethane	100	101	101	80 - 120
1,1-Dichloroethene	100	95.6	95.6	80 - 120
1,2-Dichloropropane	100	98.4	98.4	80 - 120
1,3-Dichloropropane	100	102	102	80 - 120
2,2-Dichloropropane	100	110	110	80 - 120

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Daily Calibration
Laboratory Number: 06-06 QA/QC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
1,1-Dichloropropene	100	107	107	80 - 120
Hexachlorobutadiene	100	87.9	87.9	80 - 120
Isopropylbenzene	100	110	110	80 - 120
4-Isopropyltoluene	100	101	101	80 - 120
Methylene Chloride	100	108	108	80 - 120
n-Butylbenzene	100	109	109	80 - 120
n-Propylbenzene	100	101	101	80 - 120
sec-Butylbenzene	100	100	100	80 - 120
Styrene	100	107	107	80 - 120
tert-Butylbenzene	100	101	101	80 - 120
Tetrachloroethene (PCE)	100	89.9	89.9	80 - 120
1,1,1,2-Tetrachloroethane	100	103	103	80 - 120
1,1,2,2-Tetrachloroethane	100	116	116	80 - 120
trans-1,2-Dichloroethene	100	94.5	94.5	80 - 120
trans-1,3-Dichloropropene	100	110	110	80 - 120
Trichloroethene (TCE)	100	108	108	80 - 120
Trichlorofluoromethane	100	97.8	97.8	80 - 120
1,2,3-Trichlorobenzene	100	99.4	99.4	80 - 120
1,2,4-Trichlorobenzene	100	97.4	97.4	80 - 120
1,1,1-Trichloroethane	100	110	110	80 - 120
1,1,2-Trichloroethane	100	99.4	99.4	80 - 120
1,2,3-Trichloropropane	100	101	101	80 - 120
Vinyl Chloride	100	99.5	99.5	80 - 120

Surrogates:			Rec. Limits
Dibromofluoromethane	98.9	% Recovery	78.6-115
1,2-Dichloroethane-d4	101	% Recovery	74.6-123
Toluene-d8	103	% Recovery	84.2-115
4-Bromofluorobenzene	103	% Recovery	78.6-115

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: QA/QC for Samples 45643 - 45647 and 45743.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

pH analysis

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Hose	Date Reported:	06-10-08
Laboratory Number:	45743	Date Sampled:	06-03-08
Chain of Custody:	4522	Date Received:	06-03-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:		Date Analyzed:	06-09-08
Condition:	Intact		

Parameter	Analytical Result	Units
pH	**2.29**	su

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Drums.**

Analyst

Review

CHAIN OF CUSTODY RECORD

4522

Client: Enterprise	Project Name / Location: [redacted] Drums
Client Address:	Sampler Name: R Kibler
Client Phone No.:	Client No.: 97057-0222

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	~~[illegible]~~	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	pH				Sample Cool	Sample Intact
Hose	6-3-08		45743	liquid	2						X	~~[illegible]~~						X					✓

Relinquished by: (Signature) Rob Kibler	Date 6-3-08	Time 11:33	Received by: (Signature) Kendall Angelo	Date 6/3/08	Time 1133
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Enterprise	Project #:	97057-0222
Sample ID:	Drums	Date Reported:	06-12-08
Laboratory Number:	45798	Date Sampled:	06-06-08
Chain of Custody:	4545	Date Received:	06-06-08
Sample Matrix:	Liquid	Date Analyzed:	06-09-08
Preservative:	Cool	Date Digested:	06-09-08
Condition:	Intact	Analysis Needed:	Total RCRA Metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	TCLP Regulatory Level (mg/L)
Arsenic	**ND**	**0.001**	**5.0**
Barium	**0.099**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.003**	**0.001**	**5.0**
Lead	**ND**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.185**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Drums.**

Analyst

Review

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS
Quality Control /
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-09-TM QA/QC	Date Reported:	06-12-08
Laboratory Number:	45798	Date Sampled:	N/A
Sample Matrix:	Liquid	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	06-09-08
Condition:	Intact	Date Digested:	06-09-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	0.099	0.099	0.0%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%
Lead	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.185	0.186	0.8%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.250	ND	0.252	101%	80% - 120%
Barium	0.500	0.099	0.58	97.3%	80% - 120%
Cadmium	0.250	ND	0.258	103%	80% - 120%
Chromium	0.500	0.003	0.504	100.2%	80% - 120%
Lead	0.500	ND	0.501	100.2%	80% - 120%
Mercury	0.100	ND	0.091	91.0%	80% - 120%
Selenium	0.100	0.185	0.290	102%	80% - 120%
Silver	0.100	ND	0.098	97.6%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 45798.**

Analyst

Review

CHAIN OF CUSTODY RECORD

4545

Client: Enterprise

Client Address:

Client Phone No.:

Project Name / Location: Drums

Sampler Name: R Kibler

Client No.: 97057-0222

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HNO_3		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)					Sample Cool	Sample Intact
Drums	6-6-08		45798	liquid								X										✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rol Kie	6-6-08	15:41	Kendall Angostino	6/6/08	1541
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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san juan reproduction 578-129

HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: **SODA ASH**

Revision Date: 02-Jan-2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: SODA ASH
Synonyms: None
Chemical Family: Carbonate
Application: Buffer

Manufacturer/Supplier
Halliburton Energy Services
P.O. Box 1431
Duncan, Oklahoma 73536-0431
Emergency Telephone: (281) 575-5000

Prepared By
Chemical Compliance
Telephone: 1-580-251-4335

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Sodium carbonate	497-19-8	60 - 100%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation.

4. FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin Wash with soap and water. Get medical attention if irritation persists.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media	Water fog, carbon dioxide, foam, dry chemical.
Special Exposure Hazards	Decomposition in fire may produce toxic gases.
Special Protective Equipment for Fire-Fighters	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.
NFPA Ratings:	Health 2, Flammability 0, Reactivity 0
HMIS Ratings:	Flammability 0, Reactivity 0, Health 2

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures	Use appropriate protective equipment. Avoid creating and breathing dust.
Environmental Precautionary Measures	Prevent from entering sewers, waterways, or low areas.
Procedure for Cleaning / Absorption	Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions	Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust.
Storage Information	Store away from acids. Store in a cool, dry location. Product has a shelf life of 36 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use in a well ventilated area. Localized ventilation should be used to control dust levels.
Respiratory Protection	Dust/mist respirator. (95%)
Hand Protection	Normal work gloves.
Skin Protection	Normal work coveralls.
Eye Protection	Dust proof goggles.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Color:	White
Odor:	Odorless
pH:	11.5
Specific Gravity @ 20 C (Water=1):	2.5

9. PHYSICAL AND CHEMICAL PROPERTIES

Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	48- 62
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	105.99

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong acids.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation.
Skin Contact	Prolonged or repeated contact may cause skin irritation.
Eye Contact	May cause eye irritation.
Ingestion	Irritation of the mouth, throat, and stomach.
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.

Toxicity Tests

Oral Toxicity:	LD50: 4220 mg/kg (Rat)
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined

Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not applicable
Bio-accumulation	Not Determined

Ecotoxicological Information

Acute Fish Toxicity:	TLM24: 385 mg/l (Lepomis macrochirus)
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT
Not restricted

Canadian TDG
Not restricted

ADR Not restricted

Air Transportation

ICAO/IATA Not restricted

Sea Transportation

IMDG Not restricted

Other Shipping Information

Labels: None

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS
Not applicable

Additional Information	For additional information on the use of this product, contact your local Halliburton representative. For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.
Disclaimer Statement	This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

*****END OF MSDS*****

Rupp, Ray

From: Fine, Jessica [Jessica.Fine@conocophillips.com]
Sent: Wednesday, August 29, 2007 10:32 AM
To: Rupp, Ray
Subject: FW: WCS for compressor oil

From: Fine, Jessica
Sent: Wednesday, August 29, 2007 10:28 AM
To: 'rupp@keyenergy.com'
Cc: Wurtz, Jack G; Johnson, Monica; Day, Jessica
Subject: WCS for compressor oil

Please see attached:

<<SJ 32-8 #222 Key.doc>> <<SJ 32-8 #222 tank 2 Key.doc>> <<SJ 32-8 #245 Key.doc>> <<SJ 32-8 #207.doc>> <<DOC (15).PDF>> <<Blanco 201.doc>> <<SJ 32-8 #220 Key.doc>>

If you have any questions, please call me. Thank you.

Jessica Fine
HSE Department
Office 505-326-9528
Fax 505-599-4005
Jessica.Fine@conocophillips.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th. St.
Farmington, New Mexico 87499

2. Originating Site:
San Juan 32-8 #220
Bill to: Paul Goosey/Work Order #4702717

3. Location of Material (Street Address, City, State or ULSTR):
L-24-31N-8W API #3004528223
San Juan County, NM (hCOP)

4. Source and Description of Waste: Compressor wash down water including glycol, used oil, wash water and soap, from washing down oil and gas compressor

Estimated Volume 40 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Greg Mintz, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Salt Water Disposal do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Salt Water Disposal Facility Permit #

Address of Facility:

Method of Treatment and/or Disposal:

☑ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 8-29-07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-~~1556~~ 6186

Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
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Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th. St.
Farmington, New Mexico 87499

2. Originating Site:
Blanco 201
Bill to: Paul Goosey Work Order #4720216

3. Location of Material (Street Address, City, State or ULSTR):
M-9-31N-7W API #3004523481
San Juan County, NM (hCOP)

4. Source and Description of Waste: Compressor wash down water including glycol, used oil, wash water and soap, from washing down oil and gas compressor

Estimated Volume 40 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Peggy Martz, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Salt Water Disposal do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Salt Water Disposal Facility Permit #

Address of Facility:

Method of Treatment and/or Disposal:

☑ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 8-29-07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
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1 W. Grand Avenue, Artesia, NM 88210
rict III
0 Rio Brazos Road, Aztec, NM 87410
strict IV
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
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Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th. St.
Farmington, New Mexico 87499

2. Originating Site:
San Juan 32-8 #207
Bill to: Paul Goosey/ Work Order #4702525

3. Location of Material (Street Address, City, State or ULSTR):
N-22-31N-8W API #3004527447
San Juan County, NM (hCOP)

4. Source and Description of Waste: Compressor wash down water including glycol, used oil, wash water and soap, from washing down oil and gas compressor

Estimated Volume 40 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Gregg Martinez, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Salt Water Disposal do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Salt Water Disposal Facility Permit #

Address of Facility:

Method of Treatment and/or Disposal:

☑ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

ste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 8-29-07

SIGNATURE: Ray Rupp TELEPHONE NO.: ~~505-6~~ 505 334-6186

Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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Oil Conservation Division
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Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th St.
Farmington, New Mexico 87499

2. Originating Site:
San Juan 32-8 #245
Bill to: Paul Goosey/Work Order #4702721

3. Location of Material (Street Address, City, State or ULSTR):
K-14-31N-8W API #3004528322
San Juan County, NM (hCOP)

4. Source and Description of Waste: Compressor wash down water including glycol, used oil, wash water and soap, from washing down oil and gas compressor

Estimated Volume 40 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Greg Wurtz, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Salt Water Disposal do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Salt Water Disposal Facility Permit #

Address of Facility:

Method of Treatment and/or Disposal:

☑ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Roy Rupp TITLE: Supervisor DATE: 8-29-07

SIGNATURE: Roy Rupp TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th. St.
Farmington, New Mexico 87499

2. Originating Site:
San Juan 32-8 #222 (Tank 2)
Bill to: Paul Goosey/Work Order #4702719

3. Location of Material (Street Address, City, State or ULSTR):
A-9-31N-8W API #3004527921
San Juan County, NM (hCOP)

4. Source and Description of Waste: Compressor wash down water including glycol, used oil, wash water and soap, from washing down oil and gas compressor

Estimated Volume 40 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Gregg Wurtz, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Salt Water Disposal do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Salt Water Disposal Facility Permit #

Address of Facility:

Method of Treatment and/or Disposal:

☑ Evaporation ☑ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 8-29-07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
ConocoPhillips
3401 E 30th. St.
Farmington, New Mexico 87499

2. Originating Site:
San Juan 32-8 #222 (Tank 1)
Bill to: Paul Goosey/Work Order #4702718

3. Location of Material (Street Address, City, State or ULSTR):
A-9-31N-8W API #3004527921
San Juan County, NM (hCOP)

4. Source and Description of Waste: Compressor wash down water including glycol, used oil, wash water and soap, from washing down oil and gas compressor

Estimated Volume 40 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Gregg Martz, representative or authorized agent for ConocoPhillips do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Key Energy Salt Water Disposal do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. *(Samples will be taken at gate upon delivery.)*

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Key Energy Salt Water Disposal Facility Permit #

Address of Facility:

Method of Treatment and/or Disposal:

☒ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 8-29-07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-026-413
Sample ID:	San Juan 32-8 #240	Date Reported:	08-23-07
Laboratory Number:	42800	Date Sampled:	08-21-07
Chain of Custody No:	3225	Date Received:	08-21-07
Sample Matrix:	Water	Date Extracted:	08-21-07
Preservative:	Cool / HCl	Date Analyzed:	08-23-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**0.1**	**0.1**
Total Petroleum Hydrocarbons	**0.1**	**0.1**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Compressor Wash Water**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-23-TPH QA/QC	Date Reported:	08-23-07
Laboratory Number:	42800	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-23-07
Condition:	N/A	Analysis Requested:	TPH

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gasoline Range C5 - C10	9.9518E-001	9.9319E-001	0.20%	0 - 15%
Diesel Range C10 - C28	9.9379E-001	9.9180E-001	0.20%	0 - 15%

[illegible]	[illegible]	[illegible]
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	0.1	0.1	0.0%	0 - 30%

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gasoline Range C5 - C10	ND	25.0	25.0	100.0%	75 - 125%
Diesel Range C10 - C28	0.1	25.0	25.1	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 42800**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-026-413
Sample ID:	San Juan 32-8 #240	Date Reported:	08-23-07
Chain of Custody:	3225	Date Sampled:	08-21-07
Laboratory Number:	42800	Date Received:	08-21-07
Sample Matrix:	Water	Date Analyzed:	08-23-07
Preservative:	Cool / HCL	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**ND**	**1**	**0.2**
p,m-Xylene	**0.2**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**0.2**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**98 %**
	1,4-difluorobenzene	**99 %**
	4-bromochlorobenzene	**98 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Compressor Wash Water**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	08-23-BTEX QA/QC	Date Reported:	08-23-07
Laboratory Number:	42800	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-23-07
Condition:	N/A	Analysis:	BTEX

Calibration and [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Detect. Limits ug/L	[illegible]	[illegible]	Acceptance Range 0 - 15%	[illegible]	[illegible]
Benzene	1.2592E+008	1.2630E+008	0.30%	ND	0.2
Toluene	1.0439E+008	1.0470E+008	0.30%	ND	0.2
Ethylbenzene	7.8314E+007	7.8549E+007	0.30%	ND	0.2
p,m-Xylene	1.4918E+008	1.4963E+008	0.30%	ND	0.2
o-Xylene	7.1489E+007	7.1704E+007	0.30%	ND	0.1

Duplicate Analysis	[illegible]	[illegible]	[illegible]	[illegible]
Benzene	ND	ND	0.0%	0 - 30%
Toluene	ND	ND	0.0%	0 - 30%
Ethylbenzene	ND	ND	0.0%	0 - 30%
p,m-Xylene	0.2	0.2	0.0%	0 - 30%
o-Xylene	ND	ND	0.0%	0 - 30%

Blank Spike Analysis	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	50.0	100.0%	46 - 148
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160
p,m-Xylene	0.2	100	100.0	99.8%	46 - 148
o-Xylene	ND	50.0	50.0	100.0%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 42800, 42826 - 42832**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	ConocoPhillips	Project #:	98052-028-413
Sample ID:	San Juan 32-8 #240	Date Reported:	08-22-07
Laboratory Number:	42800	Date Sampled:	08-21-07
Chain of Custody:	3225	Date Received:	08-21-07
Sample Matrix:	Water	Date Analyzed:	08-22-07
Preservative:	Cool	Date Digested:	08-21-07
Condition:	Cool & Intact	Analysis Needed:	Total RCRA Metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	TCLP Regulatory Level (mg/L)
Arsenic	**0.001**	**0.001**	**5.0**
Barium	**0.183**	**0.001**	**100**
Cadmium	**0.002**	**0.001**	**1.0**
Chromium	**0.003**	**0.001**	**5.0**
Lead	**0.024**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**ND**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Compressor Wash Water**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS
Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-22-TM QA/QC	Date Reported:	08-22-07
Laboratory Number:	42800	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	08-22-07
Condition:	N/A	Date Digested:	08-21-07

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arsenic	ND	ND	0.001	0.001	0.001	0.0%	0% - 30%
Barium	ND	ND	0.001	0.183	0.185	1.1%	0% - 30%
Cadmium	ND	ND	0.001	0.002	0.002	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%
Lead	ND	ND	0.001	0.024	0.023	4.2%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arsenic	0.500	0.001	0.500	99.8%	80% - 120%
Barium	0.500	0.183	0.68	99.9%	80% - 120%
Cadmium	0.500	0.002	0.502	100.0%	80% - 120%
Chromium	0.500	0.003	0.502	99.8%	80% - 120%
Lead	0.500	0.024	0.523	99.8%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	ND	0.499	99.8%	80% - 120%
Silver	0.500	ND	0.500	100.0%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils, SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Comments: **QA/QC for sample 42800**

Analyst

Review

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CHAIN OF CUSTODY RECORD

3225

Client: Conoco Phillips

Client Address:

Client Phone No.:

Project Name / Location: compressor wash water

Sampler Name: R McKenzie

Client No.: 96052-026-413

Gregg Wurtz

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative H_2SO_4	Preservative HNO_3	Preservative HCl	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)				Sample Cool	Sample Intact
San Juan 32-8 #240	8/21/07		42800	WATER	4		✓	✓	X	X		X									✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Kelmel McKee	8/21/07	10:55	Martin M Walters	8/21/07	1055
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

Darren Randall (Area #3)
A450251

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, New Mexico 87401 • (505) 632-0615

District I*
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Halliburton Energy Services, Inc. 4109 E. Main St. Farmington, NM 87402

2. Originating Site:
Halliburton Energy Services, Inc. 4109 E. Main St. Farmington, NM 87402

3. Location of Material (Street Address, City, State or ULSTR):
Key Energy Services, Inc. Crouch Mesa Facility

4. Source and Description of Waste: Gel water from Gel Water return Tank

Estimated Volume 150 bbls yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Gary Winn, representative or authorized agent for Halliburton Energy Services, Inc. do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

XX RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information **XX** RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, N/A, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Key energy Services, Inc.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Key energy Services, Inc.**

Address of Facility: **Cr 350 Crouch Mesa**

Method of Treatment and/or Disposal:

☐ Evaporation **X Injection** ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

X☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 12/13/07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

November 30, 2007

Project #92132-048

Halliburton Energy Services
Attn: Dean Krause III
4109 E. Main Street
Farmington, New Mexico 87401

Phone (505) 324-3515
Fax (505) 327-2534

RE: TCLP SAMPLING OF BLACK RETURN WATER TANK
EAST MAIN STREET YARD
FARMINGTON, NEW MEXICO

Dear Mr. Krause,

Enclosed, please find the laboratory results for the Toxicity Characteristic Leaching Procedure (TCLP) analysis performed on the Black Return Water Tank at the East Main Street yard. The results showed that all contaminates are below the TCLP regulatory limits.

If you have any questions or comments regarding this sampling or should you need additional copies of the report, please feel free to contact us at (505) 632-0615.

Sincerely,
ENVIROTECH INC.

Greg Crabtree by CB

Greg Crabtree, EIT
Project Engineer
gcrabtree@envirotech-inc.com

Enclosures: Laboratory Analytical Results

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Halliburton	Project #:	92132-048
Sample ID:	Return Water Tank	Date Reported:	11-14-07
Lab ID#:	43632	Date Sampled:	11-12-07
Sample Matrix:	Water	Date Received:	11-12-07
Preservative:	Cool	Date Analyzed:	11-13-07
Condition:	Cool and Intact	Chain of Custody:	3609

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 6.27**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Halliburton Yard.**

Analyst

Review

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Hall Environmental Analysis Laboratory, Inc.

Date: *27-Nov-07*

CLIENT:	Envirotech	**Client Sample ID:**	43632-Return Water Tank
Lab Order:	0711242	**Collection Date:**	11/12/2007 1:58:00 PM
Project:	Halliburton	**Date Received:**	11/14/2007
Lab ID:	0711242-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						**Analyst: SLB**
Mercury	ND	0.00020		mg/L	1	11/26/2007 3:34:32 PM
EPA 6010B: TOTAL RECOVERABLE METALS						**Analyst: NMO**
Arsenic	ND	0.020		mg/L	1	11/26/2007 9:41:08 AM
Barium	0.38	0.020		mg/L	1	11/26/2007 9:41:08 AM
Cadmium	0.0029	0.0020		mg/L	1	11/26/2007 9:41:08 AM
Chromium	0.64	0.0060		mg/L	1	11/26/2007 9:41:08 AM
Lead	0.096	0.0050		mg/L	1	11/26/2007 9:41:08 AM
Selenium	ND	0.050		mg/L	1	11/26/2007 9:41:08 AM
Silver	ND	0.0050		mg/L	1	11/26/2007 9:41:08 AM
EPA METHOD 8270C: SEMIVOLATILES						**Analyst: JDC**
Acenaphthene	ND	50		µg/L	5	11/20/2007
Acenaphthylene	ND	50		µg/L	5	11/20/2007
Aniline	ND	50		µg/L	5	11/20/2007
Anthracene	ND	50		µg/L	5	11/20/2007
Azobenzene	ND	50		µg/L	5	11/20/2007
Benz(a)anthracene	ND	50		µg/L	5	11/20/2007
Benzo(a)pyrene	ND	50		µg/L	5	11/20/2007
Benzo(b)fluoranthene	ND	50		µg/L	5	11/20/2007
Benzo(g,h,i)perylene	ND	50		µg/L	5	11/20/2007
Benzo(k)fluoranthene	ND	50		µg/L	5	11/20/2007
Benzoic acid	230	100		µg/L	5	11/20/2007
Benzyl alcohol	460	50		µg/L	5	11/26/2007
Bis(2-chloroethoxy)methane	ND	50		µg/L	5	11/20/2007
Bis(2-chloroethyl)ether	ND	50		µg/L	5	11/20/2007
Bis(2-chloroisopropyl)ether	ND	50		µg/L	5	11/20/2007
Bis(2-ethylhexyl)phthalate	ND	50		µg/L	5	11/20/2007
4-Bromophenyl phenyl ether	ND	50		µg/L	5	11/20/2007
Butyl benzyl phthalate	ND	50		µg/L	5	11/20/2007
Carbazole	ND	50		µg/L	5	11/20/2007
4-Chloro-3-methylphenol	ND	50		µg/L	5	11/20/2007
4-Chloroaniline	ND	50		µg/L	5	11/20/2007
2-Chloronaphthalene	ND	50		µg/L	5	11/20/2007
2-Chlorophenol	ND	50		µg/L	5	11/20/2007
4-Chlorophenyl phenyl ether	ND	50		µg/L	5	11/20/2007
Chrysene	ND	50		µg/L	5	11/20/2007
Di-n-butyl phthalate	ND	50		µg/L	5	11/20/2007
Di-n-octyl phthalate	ND	50		µg/L	5	11/20/2007
Dibenz(a,h)anthracene	ND	50		µg/L	5	11/20/2007
Dibenzofuran	ND	50		µg/L	5	11/20/2007
1,2-Dichlorobenzene	ND	50		µg/L	5	11/20/2007

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Nov-07*

CLIENT:	Envirotech	**Client Sample ID:**	43632-Return Water Tank
Lab Order:	0711242	**Collection Date:**	11/12/2007 1:58:00 PM
Project:	Halliburton	**Date Received:**	11/14/2007
Lab ID:	0711242-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
1,3-Dichlorobenzene	ND	50		µg/L	5	11/20/2007
1,4-Dichlorobenzene	ND	50		µg/L	5	11/20/2007
3,3'-Dichlorobenzidine	ND	50		µg/L	5	11/20/2007
Diethyl phthalate	ND	50		µg/L	5	11/20/2007
Dimethyl phthalate	ND	50		µg/L	5	11/20/2007
2,4-Dichlorophenol	ND	50		µg/L	5	11/20/2007
2,4-Dimethylphenol	ND	50		µg/L	5	11/20/2007
4,6-Dinitro-2-methylphenol	ND	50		µg/L	5	11/20/2007
2,4-Dinitrophenol	ND	50		µg/L	5	11/20/2007
2,4-Dinitrotoluene	ND	50		µg/L	5	11/20/2007
2,6-Dinitrotoluene	ND	50		µg/L	5	11/20/2007
Fluoranthene	ND	50		µg/L	5	11/20/2007
Fluorene	ND	50		µg/L	5	11/20/2007
Hexachlorobenzene	ND	50		µg/L	5	11/20/2007
Hexachlorobutadiene	ND	50		µg/L	5	11/20/2007
Hexachlorocyclopentadiene	ND	50		µg/L	5	11/20/2007
Hexachloroethane	ND	50		µg/L	5	11/20/2007
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	5	11/20/2007
Isophorone	ND	50		µg/L	5	11/20/2007
2-Methylnaphthalene	ND	50		µg/L	5	11/20/2007
2-Methylphenol	ND	50		µg/L	5	11/20/2007
3+4-Methylphenol	96	50		µg/L	5	11/20/2007
N-Nitrosodi-n-propylamine	ND	50		µg/L	5	11/20/2007
N-Nitrosodimethylamine	ND	50		µg/L	5	11/20/2007
N-Nitrosodiphenylamine	ND	50		µg/L	5	11/20/2007
Naphthalene	ND	50		µg/L	5	11/20/2007
2-Nitroaniline	ND	50		µg/L	5	11/20/2007
3-Nitroaniline	ND	50		µg/L	5	11/20/2007
4-Nitroaniline	ND	50		µg/L	5	11/20/2007
Nitrobenzene	ND	50		µg/L	5	11/20/2007
2-Nitrophenol	ND	50		µg/L	5	11/20/2007
4-Nitrophenol	ND	50		µg/L	5	11/20/2007
Pentachlorophenol	ND	50		µg/L	5	11/20/2007
Phenanthrene	ND	50		µg/L	5	11/20/2007
Phenol	ND	50		µg/L	5	11/20/2007
Pyrene	ND	50		µg/L	5	11/20/2007
Pyridine	ND	50		µg/L	5	11/20/2007
1,2,4-Trichlorobenzene	ND	50		µg/L	5	11/20/2007
2,4,5-Trichlorophenol	ND	50		µg/L	5	11/20/2007
2,4,6-Trichlorophenol	ND	50		µg/L	5	11/20/2007
Surr: 2,4,6-Tribromophenol	74.8	16.6-150		%REC	5	11/20/2007
Surr: 2-Fluorobiphenyl	80.9	19.6-134		%REC	5	11/20/2007

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Nov-07*

CLIENT:	Envirotech	**Client Sample ID:**	43632-Return Water Tank
Lab Order:	0711242	**Collection Date:**	11/12/2007 1:58:00 PM
Project:	Halliburton	**Date Received:**	11/14/2007
Lab ID:	0711242-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Surr: 2-Fluorophenol	0	9.54-113	S	%REC	5	11/20/2007
Surr: 4-Terphenyl-d14	88.0	22.7-145		%REC	5	11/20/2007
Surr: Nitrobenzene-d5	81.3	14.6-134		%REC	5	11/20/2007
Surr: Phenol-d5	38.6	10.7-80.3		%REC	5	11/20/2007
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Benzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Toluene	7.7	5.0		µg/L	5	11/21/2007 11:24:32 AM
Ethylbenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2,4-Trimethylbenzene	17	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Naphthalene	40	10		µg/L	5	11/21/2007 11:24:32 AM
1-Methylnaphthalene	ND	20		µg/L	5	11/21/2007 11:24:32 AM
2-Methylnaphthalene	29	20		µg/L	5	11/21/2007 11:24:32 AM
Acetone	ND	50		µg/L	5	11/21/2007 11:24:32 AM
Bromobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Bromochloromethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Bromodichloromethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Bromoform	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Bromomethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
2-Butanone	ND	50		µg/L	5	11/21/2007 11:24:32 AM
Carbon disulfide	ND	50		µg/L	5	11/21/2007 11:24:32 AM
Carbon Tetrachloride	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Chlorobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Chloroethane	ND	10		µg/L	5	11/21/2007 11:24:32 AM
Chloroform	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Chloromethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
2-Chlorotoluene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
4-Chlorotoluene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
cis-1,2-DCE	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	11/21/2007 11:24:32 AM
Dibromochloromethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Dibromomethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Dichlorodifluoromethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,1-Dichloroethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Nov-07*

CLIENT:	Envirotech	**Client Sample ID:**	43632-Return Water Tank
Lab Order:	0711242	**Collection Date:**	11/12/2007 1:58:00 PM
Project:	Halliburton	**Date Received:**	11/14/2007
Lab ID:	0711242-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
1,1-Dichloroethene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2-Dichloropropane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,3-Dichloropropane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
2,2-Dichloropropane	ND	10		µg/L	5	11/21/2007 11:24:32 AM
1,1-Dichloropropene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Hexachlorobutadiene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
2-Hexanone	ND	50		µg/L	5	11/21/2007 11:24:32 AM
Isopropylbenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
4-Isopropyltoluene	41	5.0		µg/L	5	11/21/2007 11:24:32 AM
4-Methyl-2-pentanone	ND	50		µg/L	5	11/21/2007 11:24:32 AM
Methylene Chloride	ND	15		µg/L	5	11/21/2007 11:24:32 AM
n-Butylbenzene	7.4	5.0		µg/L	5	11/21/2007 11:24:32 AM
n-Propylbenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
sec-Butylbenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Styrene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
tert-Butylbenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	11/21/2007 11:24:32 AM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
trans-1,2-DCE	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Trichloroethene (TCE)	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Trichlorofluoromethane	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
1,2,3-Trichloropropane	ND	10		µg/L	5	11/21/2007 11:24:32 AM
Vinyl chloride	ND	5.0		µg/L	5	11/21/2007 11:24:32 AM
Xylenes, Total	18	7.5		µg/L	5	11/21/2007 11:24:32 AM
Surr: 1,2-Dichloroethane-d4	90.7	68.1-123		%REC	5	11/21/2007 11:24:32 AM
Surr: 4-Bromofluorobenzene	93.1	53.2-145		%REC	5	11/21/2007 11:24:32 AM
Surr: Dibromofluoromethane	92.0	68.5-119		%REC	5	11/21/2007 11:24:32 AM
Surr: Toluene-d8	86.0	64-131		%REC	5	11/21/2007 11:24:32 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Halliburton **Work Order:** 0711242

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14436		*MBLK*			**Batch ID:**	14436	**Analysis Date:**		11/20/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	10						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	10						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	10						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	20						
Benzyl alcohol	ND	µg/L	10						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	10						
Bis(2-chloroisopropyl)ether	ND	µg/L	10						
Bis(2-ethylhexyl)phthalate	ND	µg/L	10						
4-Bromophenyl phenyl ether	ND	µg/L	10						
Butyl benzyl phthalate	ND	µg/L	10						
Carbazole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	10						
4-Chloroaniline	ND	µg/L	10						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	10						
Chrysene	ND	µg/L	10						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	10						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	10						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	10						
2,4-Dinitrophenol	ND	µg/L	10						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Halliburton **Work Order:** 0711242

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14436		*MBLK*			Batch ID:	14436	Analysis Date:		11/20/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	10						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	10						
3+4-Methylphenol	ND	µg/L	10						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	10						
3-Nitroaniline	ND	µg/L	10						
4-Nitroaniline	ND	µg/L	10						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	10						
4-Nitrophenol	ND	µg/L	10						
Pentachlorophenol	ND	µg/L	10						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	10						
Pyridine	ND	µg/L	10						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	10						
Sample ID: lcsd-14436		*LCS*			Batch ID:	14436	Analysis Date:		11/20/2007
Acenaphthene	71.76	µg/L	10	71.8	11	123	0	0	
4-Chloro-3-methylphenol	144.8	µg/L	10	72.4	15.4	119	0	0	
2-Chlorophenol	129.7	µg/L	10	64.8	12.2	122	0	0	
1,4-Dichlorobenzene	53.84	µg/L	10	53.8	16.9	100	0	0	
2,4-Dinitrotoluene	73.12	µg/L	10	73.1	13	138	0	0	
N-Nitrosodi-n-propylamine	70.40	µg/L	10	70.4	9.93	122	0	0	
4-Nitrophenol	68.46	µg/L	10	34.2	12.6	87.4	0	0	
Pentachlorophenol	126.6	µg/L	10	61.0	3.55	114	0	0	
Phenol	73.76	µg/L	10	36.9	7.53	73.1	0	0	
Pyrene	76.66	µg/L	10	76.7	12.6	140	0	0	
1,2,4-Trichlorobenzene	49.60	µg/L	10	49.6	17.4	98.7	0	0	
Method: EPA Method 7470: Mercury									
Sample ID: MB-14473		*MBLK*			Batch ID:	14473	Analysis Date:		11/26/2007 3:29:18 PM
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-14473		*LCS*			Batch ID:	14473	Analysis Date:		11/26/2007 3:31:02 PM
Mercury	0.004850	mg/L	0.00020	97.0	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Halliburton **Work Order:** 0711242

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: MB-14459		*MBLK*			**Batch ID:**	**14459**	**Analysis Date:**	**11/26/2007 9:20:10 AM**	
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.010						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sample ID: LCS-14459		*LCS*			**Batch ID:**	**14459**	**Analysis Date:**	**11/26/2007 9:22:31 AM**	
Arsenic	0.5259	mg/L	0.020	105	80	120			
Barium	0.4961	mg/L	0.010	99.2	80	120			
Cadmium	0.5044	mg/L	0.0020	101	80	120			
Chromium	0.5087	mg/L	0.0060	102	80	120			
Lead	0.5018	mg/L	0.0050	100	80	120			
Selenium	0.5019	mg/L	0.050	100	80	120			
Silver	0.4981	mg/L	0.0050	99.6	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Nov-07*

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Halliburton

Work Order: 0711242

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: *5ml rb*		*MBLK*			**Batch ID:** R28129		**Analysis Date:** 11/19/2007 8:08:18 AM		
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
EL PASO NATURAL GAS COMPANY, SAN JUAN AREA OFFICE, # 81 COUNTY ROAD 4900, BLOOMFIELD, NM 87413

2. **Originating Site:**
VALVE # 1 LINE 3222 AT MILEPOST 13+0026.0

3. **Location of Material (Street Address, City, State or ULSTR):**
VALVE # 1 LINE 3222 AT MILEPOST 13+0026.0

4. **Source and Description of Waste:**

CITY OF FARMINGTON, NM WATER USED TO HYDROSTATIC TEST THE EL PASO NATURAL GAS PIPELINE.

Estimated Volume 250 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 250 yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, OSIAS URIBE, representative or authorized agent for EL PASO NATURAL GAS COMPANY do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

X☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:** KEY ENERGY SERVICES, INC.
5651 US HWY 64 PO Box 900
FARMINGTON, NM 87499

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: nm 009

Address of Facility: 345 CR 350

Method of Treatment and/or Disposal:

X☐ Evaporation X☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Supervisor DATE: 12/03/07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

HALLIBURTON

Water Analysis Report

To:	XTO	Date:	10/29/2008
Submitted by:	Halliburton Energy Services	Date Rec:	10/29/2008
Attention:	Ernie Christian	Report #:	FLMM8a75
Well Name:	Irish	Formation:	Flowback

NOTE: The sample contained 10% FR-56, 0.5% Hydrocarbons and 0.2% Residue. Anthrone test was negative for broken gel.

Specific Gravity	1.015	
pH	6.3	
Resistivity	0.25	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	72	Mg / L
Sodium (Na)	13646	Mg / L
Calcium (Ca)	108	Mg / L
Magnesium (Mg)	63	Mg / L
Chlorides (Cl)	20600	Mg / L
Sulfates (SO4)	NA	Mg / L
Carbonates (CO3)	0	Mg / L
Bicarbonates (HCO3)	1545	Mg / L
Total Dissolved Solids	36035	Mg / L

Respectfully: Tim Van Guse & Holly Mbugua

Title: Lab Technician & Chemist

Location: Farmington, NM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
EL PASO NATURAL GAS COMPANY, SAN JUAN AREA OFFICE, # 81 COUNTY ROAD 4900, BLOOMFIELD, NM 87413

2. Originating Site:
VALVE # 2 LINE 3222 (west side of Farmington, near La Plata Highway).

3. Location of Material (Street Address, City, State or ULSTR):
VALVE # 2 LINE 3222 (west side of Farmington, near La Plata Highway). Township 29N, Range 14W, NE quad

4. Source and Description of Waste:

CITY OF FARMINGTON, NM WATER USED TO HYDROSTATIC TEST THE EL PASO NATURAL GAS PIPELINE.

Estimated Volume 6,500 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 6,500 yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Richard Duarte, representative or authorized agent for EL PASO NATURAL GAS COMPANY do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☒ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Not applicable, representative for Not applicable do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

Transporter: Dawn Trucking, Farmington, NM

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #:

Address of Facility:

Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

X☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Ray Rupp TITLE: Environmental Disposal Coord. DATE: 12-5-07

SIGNATURE: Ray Rupp TELEPHONE NO.: 505-334-6186

Surface Waste Management Facility Authorized Agent

elpaso

LABORATORY SERVICE REPORT

REQUESTOR:	Pyeatt, Russell S [Russ] Bloomfield,, NM (505) 632-6001	**REPORT DATE:** **REQUEST NO:** **APPROVED BY:** **PENDING REQ. ID:**	 2007101485 2007101485
DEPARTMENT:	Albuquerque Division		
DISTRIBUTION:	Duarte, Richard; Honts, Bruce E.; Sanders, Davis D (Don); Thompson, Robert B (Robbie); Uribe, Osias; Valdez, Steven J.		
PERFORMED BY:	Transwest Geochem		

Request Description: Line 3222 Hydrostatic Testing
Date Received: 11/6/2007
Date Completed:

Sample No: 1 Sampled By: Lorenzo Hernandez Sample Date: 10/27/2007 8:45:00 AM
Received Vol.: Received Date: 11/6/2007
Description: Composite Sample From Frac Tanks #1-11 and VOA's From Frac Tanks #1-11
Analysis: WP New Mexico Hydrotest
Purpose: Disposal/Environmental Concerns
Matrix: Water
Location: EPNG - Albuquerque - San Juan - 03222 - 6+3466 - Valve 2 - Frac Tank - Source Water

Sample No: 2 Sampled By: Lorenzo Hernandez Sample Date: 11/5/2007 1:10:00 PM
Received Vol.: Received Date: 11/8/2007
Description: Composite Sample From Frac Tanks #1-13 and VOA's From Frac Tanks #1-13
Analysis: WP New Mexico Hydrotest
Purpose: Disposal/Environmental Concerns
Matrix: Water
Location: EPNG - Albuquerque - San Juan - 03222 - 6+3466 - Valve 2 - Frac Tank - Hydrostatic Test Water

Data: See attached sheet(s).

Comments:

Sample:	**1**	**2**
Total Metals		
Arsenic (mg/l)	< 0.0030	0.0065
Barium (mg/l)	0.102	0.0307
Boron (mg/l)	< 0.10	< 0.10
Cadmium (mg/l)	< 0.0020	< 0.0020
Calcium (mg/l)	57	38
Chromium (mg/l)	< 0.0050	< 0.0050
Copper (mg/l)	< 0.010	< 0.010
Iron (mg/l)	0.11	7.4
Lead (mg/l)	< 0.0020	< 0.0020
Magnesium (mg/l)	8.8	8.2
Manganese (mg/l)	< 0.010	0.63

Request: 2007101485

Sample:	1	2
Mercury (mg/l)	< 0.0002	0.0028
Potassium (mg/l)	3.5	3.4
Selenium (mg/l)	< 0.0020	< 0.0020
Silica (mg/l)	4.4	0.92
Silver (mg/l)	< 0.0010	< 0.0010
Sodium (mg/l)	18	19
Zinc (mg/l)	< 0.050	< 0.050
Anions		
Bromide (mg/l)	< 0.50	< 0.50
Chloride (mg/l)	16	15
Fluoride (mg/l)	0.52	< 0.50
Nitrate/Nitrite (as N) (mg/l)	< 0.50	< 0.50
Sulfate (mg/l)	88	77
General Analyses		
pH	8.1	7.6
Specific Conductivity (µS/cm)	460	370
Alkalinity, Carbonate (As CaCO3) (mg/l)	< 20	< 20
Alkalinity, Bicarbonate (As CaCO3) (mg/l)	110	60
Alkalinity, Total (As CaCO3) (mg/l)	110	60
Hardness, Ca/Mg (As CaCO3) (mg/l)	180	130
Total Dissolved Solids (mg/l)	270	230
Volatile Organic Compounds		
Acetone (mg/l)	NT	NT
Benzene (mg/l)	< 0.0005	0.0032
Bromobenzene (mg/l)	< 0.0005	< 0.0005
Bromochloromethane (mg/l)	< 0.0005	< 0.0005
Bromodichloromethane (mg/l)	0.012	0.0008
Bromoform (mg/l)	0.0014	< 0.0005
Bromomethane (mg/l)	< 0.0005	< 0.0005
2-Butanone (mg/l)	NT	NT
n-Butylbenzene (mg/l)	< 0.0005	< 0.0005
sec-Butylbenzene (mg/l)	< 0.0005	< 0.0005
tert-Butylbenzene (mg/l)	< 0.0005	< 0.0005
Carbon disulfide (mg/l)	NT	NT
Carbon tetrachloride (mg/l)	< 0.0005	< 0.0005
Chlorobenzene (mg/l)	< 0.0005	< 0.0005
Chloroethane (mg/l)	< 0.0005	< 0.0005
Chloroform (mg/l)	0.032	0.0082
Chloromethane (mg/l)	< 0.0005	< 0.0005
2-Chlorotoluene (mg/l)	< 0.0005	< 0.0005
4-Chlorotoluene (mg/l)	< 0.0005	< 0.0005
Dibromochloromethane (mg/l)	0.0044	< 0.0005
1,2-Dibromo-3-chloropropane (mg/l)	< 0.0005	< 0.0002
1,2-Dibromoethane (mg/l)	< 0.0005	< 0.0002
Dibromomethane (mg/l)	< 0.0005	< 0.0005
1,2-Dichlorobenzene (mg/l)	< 0.0005	< 0.0005
1,3-Dichlorobenzene (mg/l)	< 0.0005	< 0.0005
1,4-Dichlorobenzene (mg/l)	< 0.0005	< 0.0005
Dichlorodifluoromethane (mg/l)	< 0.0005	< 0.0005

Request: 2007101485

Sample:	1	2
1,1-Dichloroethane (mg/l)	< 0.0005	< 0.0005
1,2-Dichloroethane (mg/l)	< 0.0005	< 0.0005
1,1-Dichloroethene (mg/l)	< 0.0005	< 0.0005
cis-1,2-Dichloroethene (mg/l)	< 0.0005	< 0.0005
trans-1,2-Dichloroethene (mg/l)	< 0.0005	< 0.0005
1,2-Dichloropropane (mg/l)	< 0.0005	< 0.0005
1,3-Dichloropropane (mg/l)	< 0.0005	< 0.0005
2,2-Dichloropropane (mg/l)	< 0.0005	< 0.0005
1,1-Dichloropropene (mg/l)	< 0.0005	< 0.0005
cis-1,3-Dichloropropene (mg/l)	< 0.0005	< 0.0005
trans-1,3-Dichloropropene (mg/l)	< 0.0005	< 0.0005
Ethylbenzene (mg/l)	< 0.0005	< 0.0005
Hexachlorobutadiene (mg/l)	< 0.0005	< 0.0005
2-Hexanone (mg/l)	NT	NT
Iodomethane (mg/l)	NT	NT
Isopropylbenzene (mg/l)	< 0.0005	< 0.0005
4-Isopropyltoluene (mg/l)	< 0.0005	0.0007
Methylene chloride (mg/l)	0.00063	< 0.0005
4-Methyl-2-pentanone (mg/l)	NT	NT
Methyl tert-butyl ether (mg/l)	< 0.0005	< 0.0005
Naphthalene (mg/l)	< 0.0005	0.0036
n-Propylbenzene (mg/l)	< 0.0005	< 0.0005
Styrene (mg/l)	< 0.0005	< 0.0005
1,1,1,2-Tetrachloroethane (mg/l)	< 0.0005	< 0.0005
1,1,2,2-Tetrachloroethane (mg/l)	< 0.0005	< 0.0005
Tetrachloroethene (mg/l)	< 0.0005	< 0.0005
Toluene (mg/l)	< 0.0005	0.0033
1,2,3-Trichlorobenzene (mg/l)	< 0.0005	< 0.0005
1,2,4-Trichlorobenzene (mg/l)	< 0.0005	< 0.0005
1,1,1-Trichloroethane (mg/l)	< 0.0005	< 0.0005
1,1,2-Trichloroethane (mg/l)	< 0.0005	< 0.0005
Trichloroethene (mg/l)	< 0.0005	< 0.0005
Trichlorofluoromethane (mg/l)	< 0.0005	< 0.0005
1,2,3-Trichloropropane (mg/l)	< 0.0005	< 0.0005
1,2,4-Trimethylbenzene (mg/l)	< 0.0005	< 0.0005
1,3,5-Trimethylbenzene (mg/l)	< 0.0005	< 0.0005
Vinyl Acetate (mg/l)	NT	NT
Vinyl chloride (mg/l)	< 0.0005	< 0.0005
Xylenes, Total (mg/l)	< 0.0005	0.0012
Semi Volatiles Organic Compounds		
Acenaphthene (mg/l)	NT	NT
Acenaphthylene (mg/l)	NT	NT
Anthracene (mg/l)	NT	NT
Azobenzene (mg/l)	NT	NT
Benz(a)anthracene (mg/l)	NT	NT
Benzidine (mg/l)	NT	NT
Benzo(b)fluoranthene (mg/l)	NT	NT
Benzo(k)fluoranthene (mg/l)	NT	NT
Benzo(g,h,i)perylene (mg/l)	NT	NT
Benzo(a)pyrene (mg/l)	< 0.000020	< 0.00002
Bis(2-chloroethoxy)methane (mg/l)	NT	NT

Request: 2007101485

Sample:	1	2
Bis(2-chloroethyl)ether (mg/l)	NT	NT
Bis(2-chloroisopropyl)ether (mg/l)	NT	NT
Bis(2-ethylhexyl)phthalate (mg/l)	< 0.00059	0.0012
4-Bromophenyl phenyl ether (mg/l)	NT	NT
Butyl benzyl phthalate (mg/l)	NT	NT
4-Chloro-3-methylphenol (mg/l)	NT	NT
2-Chloronaphthalene (mg/l)	NT	NT
2-Chlorophenol (mg/l)	NT	NT
4-Chlorophenyl phenyl ether (mg/l)	NT	NT
Chrysene (mg/l)	NT	NT
Dibenz(a,h)anthracene (mg/l)	NT	NT
Di-n-butyl phthalate (mg/l)	NT	NT
1,2-Dichlorobenzene (mg/l)	NT	NT
1,3-Dichlorobenzene (mg/l)	NT	NT
1,4-Dichlorobenzene (mg/l)	NT	NT
2,4-Dichlorophenol (mg/l)	NT	NT
3,3'-Dichlorobenzidine (mg/l)	NT	NT
Diethyl phthalate (mg/l)	NT	NT
2,4-Dimethylphenol (mg/l)	NT	NT
Dimethyl phthalate (mg/l)	NT	NT
4,6-Dinitro-2-methylphenol (mg/l)	NT	NT
2,4-Dinitrotoluene (mg/l)	NT	NT
2,6-Dinitrotoluene (mg/l)	NT	NT
2,4-Dinitrophenol (mg/l)	NT	NT
Di-n-octyl phthalate (mg/l)	NT	NT
Fluoranthene (mg/l)	NT	NT
Fluorene (mg/l)	NT	NT
Hexachlorobenzene (mg/l)	< 0.000099	< 0.0001
Hexachlorobutadiene (mg/l)	NT	NT
Hexachlorocyclopentadiene (mg/l)	< 0.000099	< 0.0001
Hexachloroethane (mg/l)	NT	NT
Indeno(1,2,3-cd)pyrene (mg/l)	NT	NT
Isophorone (mg/l)	NT	NT
Naphthalene (mg/l)	NT	NT
Nitrobenzene (mg/l)	NT	NT
2-Nitrophenol (mg/l)	NT	NT
4-Nitrophenol (mg/l)	NT	NT
N-Nitrosodimethylamine (mg/l)	NT	NT
N-Nitrosodi-n-propylamine (mg/l)	NT	NT
N-Nitrosodiphenylamine (mg/l)	NT	NT
Pentachlorophenol (mg/l)	NT	NT
Phenol (mg/l)	NT	NT
Phenanthrene (mg/l)	NT	NT
Pyrene (mg/l)	NT	NT
1,2,4-Trichlorobenzene (mg/l)	NT	NT
2,4,6-Trichlorophenol (mg/l)	NT	NT
Radiochemical Activity		
Radium 226 (pCi/L)	<0.3	<0.5
Radium 228 (pCi/L)	<0.3	<0.4

elpaso

LABORATORY SERVICE REPORT

REQUESTOR:	Pyeatt, Russell S [Russ] Bloomfield,, NM (505) 632-6001	**REPORT DATE:** **REQUEST NO:** **APPROVED BY:** **PENDING REQ. ID:**	 2007111577 2007111577
DEPARTMENT:	Albuquerque Division		
DISTRIBUTION:	Duarte, Richard; Honts, Bruce E.; Sanders, Davis D (Don); Thompson, Robert B (Robbie); Uribe, Osias; Valdez, Steven J.		
PERFORMED BY:	Transwest Geochem		

Request Description: Hydrostatic Test Water - Ln. 3222 - Frac Tank Located at Dawn Trucking Co.
Date Received: 11/8/2007
Date Completed:

Sample No: 1 Sampled By: Lorenzo Hernandez Sample Date: 11/8/2007 2:50:00 PM

Received Vol.: Received Date: 11/8/2007

Description: One Frac Tank
Analysis: WP New Mexico Hydrotest
Purpose: Disposal/Environmental Concerns
Matrix: Water
Location: EPNG - Albuquerque - San Juan - 03222 - 6+3466 - Valve 2 - Frac Tank - Hydrostatic Test Water

Data: See attached sheet(s).

Comments:

Sample:	1
Total Metals	
Arsenic (mg/l)	0.0038
Barium (mg/l)	0.0462
Boron (mg/l)	< 0.10
Cadmium (mg/l)	< 0.0020
Calcium (mg/l)	32
Chromium (mg/l)	< 0.0050
Copper (mg/l)	< 0.010
Iron (mg/l)	5
Lead (mg/l)	< 0.0020
Magnesium (mg/l)	6.9
Manganese (mg/l)	0.75
Mercury (mg/l)	0.0006
Potassium (mg/l)	16
Selenium (mg/l)	< 0.0020
Silica (mg/l)	0.66
Silver (mg/l)	< 0.0010
Sodium (mg/l)	23
Zinc (mg/l)	< 0.050

Request: 2007111577

Sample:	1
Anions	
Bromide (mg/l)	< 0.50
Chloride (mg/l)	25
Fluoride (mg/l)	< 0.50
Nitrate/Nitrite (as N) (mg/l)	0.61
Sulfate (mg/l)	85
General Analyses	
pH	7.5
Specific Conductivity (µS/cm)	410
Alkalinity, Carbonate (As CaCO3) (mg/l)	< 20
Alkalinity, Bicarbonate (As CaCO3) (mg/l)	40
Alkalinity, Total (As CaCO3) (mg/l)	40
Hardness, Ca/Mg (As CaCO3) (mg/l)	110
Total Dissolved Solids (mg/l)	240
Volatile Organic Compounds	
Acetone (mg/l)	NT
Benzene (mg/l)	0.017
Bromobenzene (mg/l)	< 0.0005
Bromochloromethane (mg/l)	< 0.0005
Bromodichloromethane (mg/l)	0.0006
Bromoform (mg/l)	< 0.0005
Bromomethane (mg/l)	< 0.0005
2-Butanone (mg/l)	NT
n-Butylbenzene (mg/l)	< 0.0005
sec-Butylbenzene (mg/l)	< 0.0005
tert-Butylbenzene (mg/l)	< 0.0005
Carbon disulfide (mg/l)	NT
Carbon tetrachloride (mg/l)	< 0.0005
Chlorobenzene (mg/l)	< 0.0005
Chloroethane (mg/l)	< 0.0005
Chloroform (mg/l)	0.0006
Chloromethane (mg/l)	< 0.0005
2-Chlorotoluene (mg/l)	< 0.0005
4-Chlorotoluene (mg/l)	< 0.0005
Dibromochloromethane (mg/l)	0.0008
1,2-Dibromo-3-chloropropane (mg/l)	< 0.0002
1,2-Dibromoethane (mg/l)	< 0.0002
Dibromomethane (mg/l)	< 0.0005
1,2-Dichlorobenzene (mg/l)	< 0.0005
1,3-Dichlorobenzene (mg/l)	< 0.0005
1,4-Dichlorobenzene (mg/l)	< 0.0005
Dichlorodifluoromethane (mg/l)	< 0.0005
1,1-Dichloroethane (mg/l)	< 0.0005
1,2-Dichloroethane (mg/l)	< 0.0005
1,1-Dichloroethene (mg/l)	< 0.0005
cis-1,2-Dichloroethene (mg/l)	< 0.0005
trans-1,2-Dichloroethene (mg/l)	< 0.0005
1,2-Dichloropropane (mg/l)	< 0.0005
1,3-Dichloropropane (mg/l)	< 0.0005

Request: 2007111577

Sample:	1
2,2-Dichloropropane (mg/l)	< 0.0005
1,1-Dichloropropene (mg/l)	< 0.0005
cis-1,3-Dichloropropene (mg/l)	< 0.0005
trans-1,3-Dichloropropene (mg/l)	< 0.0005
Ethylbenzene (mg/l)	< 0.0005
Hexachlorobutadiene (mg/l)	< 0.0005
2-Hexanone (mg/l)	NT
Iodomethane (mg/l)	NT
Isopropylbenzene (mg/l)	< 0.0005
4-Isopropyltoluene (mg/l)	< 0.0005
Methylene chloride (mg/l)	< 0.0005
4-Methyl-2-pentanone (mg/l)	NT
Methyl tert-butyl ether (mg/l)	< 0.0005
Naphthalene (mg/l)	0.0048
n-Propylbenzene (mg/l)	< 0.0005
Styrene (mg/l)	< 0.0005
1,1,1,2-Tetrachloroethane (mg/l)	< 0.0005
1,1,2,2-Tetrachloroethane (mg/l)	< 0.0005
Tetrachloroethene (mg/l)	< 0.0005
Toluene (mg/l)	0.016
1,2,3-Trichlorobenzene (mg/l)	< 0.0005
1,2,4-Trichlorobenzene (mg/l)	< 0.0005
1,1,1-Trichloroethane (mg/l)	< 0.0005
1,1,2-Trichloroethane (mg/l)	< 0.0005
Trichloroethene (mg/l)	< 0.0005
Trichlorofluoromethane (mg/l)	< 0.0005
1,2,3-Trichloropropane (mg/l)	< 0.0005
1,2,4-Trimethylbenzene (mg/l)	< 0.0005
1,3,5-Trimethylbenzene (mg/l)	< 0.0005
Vinyl Acetate (mg/l)	NT
Vinyl chloride (mg/l)	< 0.0005
Xylenes, Total (mg/l)	0.0045

Semi Volatiles Organic Compounds	
Acenaphthene (mg/l)	NT
Acenaphthylene (mg/l)	NT
Anthracene (mg/l)	NT
Azobenzene (mg/l)	NT
Benz(a)anthracene (mg/l)	NT
Benzidine (mg/l)	NT
Benzo(b)fluoranthene (mg/l)	NT
Benzo(k)fluoranthene (mg/l)	NT
Benzo(g,h,i)perylene (mg/l)	NT
Benzo(a)pyrene (mg/l)	< 0.00002
Bis(2-chloroethoxy)methane (mg/l)	NT
Bis(2-chloroethyl)ether (mg/l)	NT
Bis(2-chloroisopropyl)ether (mg/l)	NT
Bis(2-ethylhexyl)phthalate (mg/l)	0.0095
4-Bromophenyl phenyl ether (mg/l)	NT
Butyl benzyl phthalate (mg/l)	NT
4-Chloro-3-methylphenol (mg/l)	NT
2-Chloronaphthalene (mg/l)	NT

Request: 2007111577

Sample:	1
2-Chlorophenol (mg/l)	NT
4-Chlorophenyl phenyl ether (mg/l)	NT
Chrysene (mg/l)	NT
Dibenz(a,h)anthracene (mg/l)	NT
Di-n-butyl phthalate (mg/l)	NT
1,2-Dichlorobenzene (mg/l)	NT
1,3-Dichlorobenzene (mg/l)	NT
1,4-Dichlorobenzene (mg/l)	NT
2,4-Dichlorophenol (mg/l)	NT
3,3'-Dichlorobenzidine (mg/l)	NT
Diethyl phthalate (mg/l)	NT
2,4-Dimethylphenol (mg/l)	NT
Dimethyl phthalate (mg/l)	NT
4,6-Dinitro-2-methylphenol (mg/l)	NT
2,4-Dinitrotoluene (mg/l)	NT
2,6-Dinitrotoluene (mg/l)	NT
2,4-Dinitrophenol (mg/l)	NT
Di-n-octyl phthalate (mg/l)	NT
Fluoranthene (mg/l)	NT
Fluorene (mg/l)	NT
Hexachlorobenzene (mg/l)	< 0.0001
Hexachlorobutadiene (mg/l)	NT
Hexachlorocyclopentadiene (mg/l)	< 0.0001
Hexachloroethane (mg/l)	NT
Indeno(1,2,3-cd)pyrene (mg/l)	NT
Isophorone (mg/l)	NT
Naphthalene (mg/l)	NT
Nitrobenzene (mg/l)	NT
2-Nitrophenol (mg/l)	NT
4-Nitrophenol (mg/l)	NT
N-Nitrosodimethylamine (mg/l)	NT
N-Nitrosodi-n-propylamine (mg/l)	NT
N-Nitrosodiphenylamine (mg/l)	NT
Pentachlorophenol (mg/l)	NT
Phenol (mg/l)	NT
Phenanthrene (mg/l)	NT
Pyrene (mg/l)	NT
1,2,4-Trichlorobenzene (mg/l)	NT
2,4,6-Trichlorophenol (mg/l)	NT
Radiochemical Activity	
Radium 226 (pCi/L)	<0.6
Radium 228 (pCi/L)	<0.4

April 2010 UIC-5 Injection Water Chemical Analysis

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Thursday, April 22, 2010

Christine Walters
Envirotech
5796 US Highway 64
Farmington, NM 87401

TEL: (505) 632-0615
FAX (505) 632-1865

RE: Key Energy

Order No.: 1004278

Dear Christine Walters:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/14/2010 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Apr-10*

CLIENT:	Envirotech	**Client Sample ID:**	53668-SWD
Lab Order:	1004278	**Collection Date:**	4/12/2010 2:30:00 PM
Project:	Key Energy	**Date Received:**	4/14/2010
Lab ID:	1004278-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 200.8: METALS						Analyst: **TES**
Arsenic	0.0039	0.0025		mg/L	2.5	4/20/2010 2:49:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy **Work Order:** 1004278

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 200.8: Metals											
Sample ID: MB-21976		*MBLK*				Batch ID:	**21976**	Analysis Date:		4/20/2010 2:26:04 PM	
Arsenic	ND	mg/L	0.0025								
Sample ID: LLLCS-21976		*LCS*				Batch ID:	**21976**	Analysis Date:		4/20/2010 2:31:38 PM	
Arsenic	0.05223	mg/L	0.0025	0.05	0	104	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ENVIROTECH

Date Received: 4/14/2010

Work Order Number 1004278

Received by: ARS

Sample ID labels checked by: [illegible] Initials

Checklist completed by: [illegible] Signature 4.14.10 Date

Matrix: Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Number of preserved bottles checked for pH: [illegible]

(<2) >12 unless noted below.

Container/Temp Blank temperature? 3.6° <6° C *Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Envirotech

Address: 5796 US Hwy 64
Farmington, NM 87401

Phone #: (505-632-0615

email or Fax#: cwalters@envirotech

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Key Energy

Project #: 98065-0013

Project Manager: Christine Walters

Sampler: Neil Allen

On Ice: ☒ Yes ☐ No

Sample Temperature: 3°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1004278	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Arsenic (7060) ~~Total Metals 200.8 ICPMS~~			Air Bubbles (Y or N)
4/12/10	14:30	53668-SLWD	Plastic 125 mL	HNO_3	-1												X			

Date:	Time:	Relinquished by:	Received by:	Remarks:
4/13/10	16:30	Neil Thompson	9:20 4/14/10	~~*Arsenic analysis using atomic absorption (EPA method 7060)~~ Decided on EDA METHOD ~~1020~~ 200.8 PO# 14861 Speaking with client
Date:	Time:	Relinquished by:	Received by:	

4/14/10

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

CHAIN OF CUSTODY RECORD

09069

Client: Key Energy	Project Name / Location: Sanco SWD #1
Client Address:	Sampler Name: Neil Allen
Client Phone No.: 486-2010	Client No.: 98065-0013

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl₂	Preservative HCl	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA ~~8~~ 6 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	8270	Hg	As	Sample Cool	Sample Intact
SWD	4/12/10	14:30	53668	Soil Sludge Solid [✓ Aqueous]	7 2L ambers 1 900L 2 VOAs 1 125 1 250						X	X	X	X					X	X	X	y	y
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Neil Allen	4/12/10	2:55		4/12/10	14:55
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Preservative:	Cool	Date Digested:	04-13-10
Condition:	Intact	Analysis Needed:	RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Barium	**8.23**	**0.001**
Cadmium	**ND**	**0.001**
Chromium	**0.146**	**0.001**
Lead	**0.006**	**0.001**
Selenium	**0.003**	**0.001**
Silver	**0.026**	**0.001**

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Sunco SWD #1**

Analyst

Review

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TRACE METAL ANALYSIS
Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	QA/QC
Sample ID:	04-12 TM QA/AC	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Analysis Requested:	RCRA Metals	Date Analyzed:	04-13-10
Condition:	N/A	Date Digested:	04-13-10

Blank & Duplicate	Instrument Conc. (mg/L)	Method Blank (mg/L)	Detection Limit	Sample	Duplicate	% RPD	Acceptance Range
Barium	ND	ND	0.001	8.23	8.66	5.2%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.146	0.149	2.0%	0% - 30%
Lead	ND	ND	0.001	0.006	0.005	16.4%	0% - 30%
Selenium	ND	ND	0.001	0.003	0.002	28.6%	0% - 30%
Silver	ND	ND	0.001	0.026	0.029	10.9%	0% - 30%

Matrix Spike	Spike Added (mg/L)	Sample	Spike Recovery	% Recovery	Acceptance Range
Barium	0.500	8.23	8.97	103%	80% - 120%
Cadmium	0.250	ND	0.242	96.7%	80% - 120%
Chromium	0.500	0.146	0.680	105%	80% - 120%
Lead	0.500	0.006	0.471	93.1%	80% - 120%
Selenium	0.100	0.003	0.084	81.7%	80% - 120%
Silver	0.100	0.026	0.141	112%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision Spectorscopy, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 53668.**

Analyst

Review

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TOTAL MERCURY ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Condition:	Cool & Intact	Date Digested:	04-13-10
		Analysis Needed:	Total Mercury

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Mercury	**0.09**	**0.02**

ND - Parameter not detected at the stated detection limit.

References: Method 7470A, Mercury in Liquid Waste (Manual Cold-Vapor Technique).
SW-846, USEPA, December 1996.

Comments: **Sunco SWD #1**

Analyst

Review

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Total Mercury Analysis
Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-13-Hg QA/QC	Date Reported:	04-13-10
Laboratory Number:	53668	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Analysis Requested:	Total Mercury	Date Analyzed:	04-13-10
Condition:	N/A	Date Digested:	04-13-10

Blank & Duplicate Conc. (ug/L)	Instrument Blank (ug/L)	Method Blank (ug/L)	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Mercury	**ND**	**ND**	**0.02**	**0.09**	**0.08**	**11.1%**	**0% - 30%**

Spike Conc. (ug/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Mercury	**10.0**	**0.09**	**8.26**	**81.8%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 7470A, Mercury in Liquid Waste (Manual Cold-Vapor Technique).
SW-846, USEPA, December 1996.

Comments: **QA/QC for Sample 53668.**

Analyst

Review

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Analytical Laboratory

CATION / ANION ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-14-10
Laboratory Number:	53868	Date Sampled:	04-12-10
Chain of Custody:	9069	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-13-10
Preservative:	Cool		
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	8.38	s.u.		
Conductivity @ 25° C	17,600	umhos/cm		
Total Dissolved Solids @ 180C	10,800	mg/L		
Total Dissolved Solids (Calc)	10,830	mg/L		
SAR	50.6	ratio		
Total Alkalinity as CaCO3	1,340	mg/L		
Total Hardness as CaCO3	969	mg/L		
Bicarbonate as CaCO3	1,340	mg/L	21.96	meq/L
Carbonate as CaCO3	<0.1	mg/L	0.00	meq/L
Hydroxide as CaCO3	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.900	mg/L	0.01	meq/L
Nitrite Nitrogen	0.037	mg/L	0.00	meq/L
Chloride	4,850	mg/L	136.82	meq/L
Fluoride	2.06	mg/L	0.11	meq/L
Phosphate	2.94	mg/L	0.09	meq/L
Sulfate	1,020	mg/L	21.24	meq/L
Iron	1.65	mg/L	0.06	meq/L
Calcium	362	mg/L	18.06	meq/L
Magnesium	15.5	mg/L	1.28	meq/L
Potassium	142	mg/L	3.63	meq/L
Sodium	3,620	mg/L	157.47	meq/L
Cations			180.44	meq/L
Anions			180.23	meq/L
Cation/Anion Difference			0.12%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Sunco SWD #1

Analyst

Review

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Analytical Laboratory

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-14-10
Lab ID#:	53668	Date Sampled:	04-12-10
Sample Matrix:	Aqueous	Date Received:	04-12-10
Preservative:	Cool	Date Analyzed:	04-14-10
Condition:	Intact	Chain of Custody:	9069

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 8.33**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Sunco SWD #1**

Analyst

Christine M Walters
Review

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EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client:	Key Energy	Project #:	98065-0013
Sample ID:	SWD	Date Reported:	04-13-10
Chain of Custody:	9069	Date Sampled:	04-12-10
Laboratory Number:	53668	Date Received:	04-12-10
Sample Matrix:	Aqueous	Date Analyzed:	04-12-10
Preservative:		Analysis Requested:	8260 VOC
Condition:	Cool and Intact		

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	667	(ug/L)	1.0	10
Toluene	5,140	(ug/L)	1.0	100
Ethylbenzene	887	(ug/L)	1.0	10
Xylenes, Total	3,520	(ug/L)	1.0	100
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	760	(ug/L)	1.0	10
1,3,5-Trimethylbenzene	1,060	(ug/L)	1.0	10
1,2-Dichloroethane (EDC)	18.8	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	178	(ug/L)	1.0	1
1-Methylnaphthalene	83.0	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	88.4	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

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EPA Method 8260B
Volatile Organic Compounds by GC/MS

Client: Key Energy
Sample ID: SWD
Laboratory Number: 53668

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	745	(ug/L)	1.0	10
4-Isopropyltoluene	97.3	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	3.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	183	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	2,206	(ug/L)	1.0	10
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	105	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	97.2	% Recovery	74.6-123	1
Toluene-d8	106	% Recovery	84.2-115	1
4-Bromofluorobenzene	103	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **Sunco SWD #1**

Analyst

Christine M Walters
Review

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QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Analytical Laboratory

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Daily Calibration Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Daily Calibration	Date Reported:	04-13-10
Laboratory Number:	0412V	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-12-10
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
Benzene	100	96.0	96.0	80 - 120
Toluene	100	98.1	98.1	80 - 120
Ethylbenzene	100	90.3	90.3	80 - 120
Xylenes, Total	100	104	104	80 - 120
Methyl tert-butyl ether (MTBE)	100	84.3	84.3	80 - 120
1,2,4-Trimethylbenzene	100	85.1	85.1	80 - 120
1,3,5-Trimethylbenzene	100	88.6	88.6	80 - 120
1,2-Dichloroethane (EDC)	100	88.6	88.6	80 - 120
1,2-Dibromoethane (EDB)	100	96.5	96.5	80 - 120
Naphthalene	100	89.1	89.1	80 - 120
1-Methylnaphthalene	100	94.7	94.7	80 - 120
2-Methylnaphthalene	100	105	105	80 - 120
Bromobenzene	100	86.1	86.1	80 - 120
Bromochloromethane	100	87.6	87.6	80 - 120
Bromodichloromethane	100	84.1	84.1	80 - 120
Bromoform	100	85.5	85.5	80 - 120
Bromomethane	100	94.7	94.7	80 - 120
Carbon Tetrachloride	100	85.5	85.5	80 - 120
Chlorobenzene	100	93.2	93.2	80 - 120
Chloroethane	100	90.3	90.3	80 - 120
Chloroform	100	84.7	84.7	80 - 120
Chloromethane	100	100	100	80 - 120
2-Chlorotoluene	100	85.5	85.5	80 - 120
4-Chlorotoluene	100	86.2	86.2	80 - 120
cis-1,2-Dichloroethene	100	96.8	96.8	80 - 120
cis-1,3-Dichloropropene	100	90.6	90.6	80 - 120
1,2-Dibromo-3-chloropropane	100	96.9	96.9	80 - 120
Dibromochloromethane	100	87.8	87.8	80 - 120
Dibromoethane	100	94.3	94.3	80 - 120
1,2-Dichlorobenzene	100	95.6	95.6	80 - 120
1,3-Dichlorobenzene	100	96.4	96.4	80 - 120
1,4-Dichlorobenzene	100	97.7	97.7	80 - 120
Dichlorodifluoromethane	100	87.5	87.5	80 - 120
1,1-Dichloroethane	100	88.4	88.4	80 - 120
1,1-Dichloroethene	100	93.9	93.9	80 - 120
1,2-Dichloropropane	100	95.7	95.7	80 - 120
1,3-Dichloropropane	100	85.0	85.0	80 - 120
2,2-Dichloropropane	100	83.5	83.5	80 - 120

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Analytical Laboratory

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Daily Calibration
Laboratory Number: 0412V

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
1,1-Dichloropropene	100	84.0	84.0	80 - 120
Hexachlorobutadiene	100	89.1	89.1	80 - 120
Isopropylbenzene	100	94.7	94.7	80 - 120
4-Isopropyltoluene	100	105.5	105.5	80 - 120
Methylene Chloride	100	101.2	101.2	80 - 120
n-Butylbenzene	100	91.6	91.6	80 - 120
n-Propylbenzene	100	92.0	92.0	80 - 120
sec-Butylbenzene	100	88.6	88.6	80 - 120
Styrene	100	86.9	86.9	80 - 120
tert-Butylbenzene	100	89.8	89.8	80 - 120
Tetrachloroethene (PCE)	100	97.7	97.7	80 - 120
1,1,1,2-Tetrachloroethane	100	84.7	84.7	80 - 120
1,1,2,2-Tetrachloroethane	100	91.0	91.0	80 - 120
trans-1,2-Dichloroethene	100	91.3	91.3	80 - 120
trans-1,3-Dichloropropene	100	82.4	82.4	80 - 120
Trichloroethene (TCE)	100	85.3	85.3	80 - 120
Trichlorofluoromethane	100	84.6	84.6	80 - 120
1,2,3-Trichlorobenzene	100	95.2	95.2	80 - 120
1,2,4-Trichlorobenzene	100	94.7	94.7	80 - 120
1,1,1-Trichloroethane	100	85.0	85.0	80 - 120
1,1,2-Trichloroethane	100	83.7	83.7	80 - 120
1,2,3-Trichloropropane	100	85.9	85.9	80 - 120
Vinyl Chloride	100	86.3	86.3	80 - 120

Surrogates:			Rec. Limits
Dibromofluoromethane	101	% Recovery	78.6-115
1,2-Dichloroethane-d4	106	% Recovery	74.6-123
Toluene-d8	89.3	% Recovery	84.2-115
4-Bromofluorobenzene	93.0	% Recovery	78.6-115

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 53637 and 53668.**

Analyst

Christine M Walters
Review

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envirotech
Analytical Laboratory

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Blank	Date Reported:	04-13-10
Laboratory Number:	0412VBLK	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-12-10
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1

envirotech
Analytical Laboratory

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client: QA/QC
Sample ID: Blank
Laboratory Number: 0412VBLK

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	1.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	78.9	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	89.4	% Recovery	74.6-123	1
Toluene-d8	94.6	% Recovery	84.2-115	1
4-Bromofluorobenzene	95.9	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 53637 and 53668.**

Analyst

Christine M Waeters
Review

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Analytical Laboratory

EPA Method 8260B
Volatile Organic Compounds by GC/MS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spikes	Date Reported:	04-13-10
Laboratory Number:	04-12 VOA - 53637	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-12-10
Condition:	N/A	Analysis Requested:	8260 VOC

Spike Analyte	Sample	Units: ug/L Added	Result	%Recovery	Recovery Limits	Det. Limit
Benzene	330	100.0	385	89.6%	85.3 - 120	1.0
Toluene	1,800	100.0	2,090	110%	73 - 123	1.0
Chlorobenzene	ND	100.0	103	103%	84.7 - 119	1.0
1,1-Dichloroethene	ND	100.0	100	100%	83.4 - 122	1.0
Trichloroethene (TCE)	ND	100.0	98	98.4%	76.1 - 126	1.0

Spike Duplicate Analyte	Sample	Units: ug/L Added	Result	%Recovery	Recovery Limits	Det. Limit
Benzene	330	100.0	358	83.3%	85.3 - 120	1.0
Toluene	1,800	100.0	1,950	103%	73 - 123	1.0
Chlorobenzene	ND	100.0	96	95.8%	84.7 - 119	1.0
1,1-Dichloroethene	ND	100.0	96	95.9%	83.4 - 122	1.0
Trichloroethene (TCE)	ND	100.0	88	88.1%	76.1 - 126	1.0

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8260,Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry,Test Methods for Evaluating Solid Waste,SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 53637 and 53668.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

09069

Client: Key Energy	Project Name / Location: Sanco SWD #1	ANALYSIS / PARAMETERS	
Client Address:	Sampler Name: Neil Allen		
Client Phone No.: 486-2010	Client No.: 98065-0013		

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA ~~8~~ 10 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	8270	Hg	As	Sample Cool	Sample Intact
SWD	4/12/10	14:30	53668	Soil Sludge Solid [✓ Aqueous]	7 2L ambers 1 500L 2 VOAs 1 125 1 250						X	X	X	X					X	X	X	Y	Y
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
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				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Neil Allen	4/12/10	2:55		4/12/10	14:55
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy Serv.	Project #:	98065-0013
Sample ID:	Sample #1 Top	Date Reported:	04-23-10
Laboratory Number:	53755	Date Sampled:	04-19-10
Chain of Custody No:	9118	Date Received:	04-19-10
Sample Matrix:	Soil	Date Extracted:	04-21-10
Preservative:	Cool	Date Analyzed:	04-22-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**144**	**0.1**
Total Petroleum Hydrocarbons	**144**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Sunco SWD #1**

Analyst

Review

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy Serv.	Project #:	98065-0013
Sample ID:	Sample #2 Top	Date Reported:	04-23-10
Laboratory Number:	53756	Date Sampled:	04-19-10
Chain of Custody No:	9118	Date Received:	04-19-10
Sample Matrix:	Soil	Date Extracted:	04-21-10
Preservative:	Cool	Date Analyzed:	04-22-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**222**	**0.1**
Total Petroleum Hydrocarbons	**222**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Sunco SWD #1**

Analyst

Review

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APPENDIX J

NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 9-17-09 Operator Key Energy Svc. API #30-0 45-28653

Property Name Sandia Dagger Well No. 1 Location: Unit E Section 2 Township 29 Range 12

Well Status (Shut-In or Producing) Initial PSI: Tubing 150 Intermediate 0 Casing 350 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE Bradenhead BH	Int	Csg	INTERM Int	Csg
Initial 5 min					
10 min					
15 min					
20 min					
25 min					
30 min					

FLOW CHARACTERISTICS	BRADENHEAD	INTERMEDIATE
Steady Flow		
Surges		
Down to Nothing		
Nothing	/	
Gas		
Gas & Water		
Water		

RCVD SEP 17 '09
OIL CONS. DIV.
DIST. 3

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR ____ FRESH ____ SALTY ____ SULFUR ____ BLACK ____

5 MINUTE SHUT-IN PRESSURE BRADENHEAD 0 INTERMEDIATE /

REMARKS Nothing when opened.

By [signature] Witness Monica Cadillac

Supervisor
(Position)

E-mail address

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

MECHANICAL INTEGRITY TEST REPORT

(TA OR UIC)

Date of Test 9-17-09 Operator Key Energy Svc API # 30-0 45-28653

Property Name Sauer Disposal Well # 1 Location Unit E Sec 5 Twn 29 Rge 12

Land Type
State ____
Federal ____
Private ✓
Indian ____

Well Type
Water Injection ____
Salt Water Disposal ✓
Gas Injection ____
Producing Oil/Gas ____
Pressure observation ____

SWD-457

Temporarily Abandoned Well (Y/N) (N) TA Expires ____

Casing Pres 0
Bradenhead Pres 0
Tubing Pres 1500
Int. Casing Pres N/A

Tbg. SI Pres ____
Tbg. Inj Pres. ____

Max Inj Pres. ____

RCVD SEP 17 '09
OIL CONS. DIV.
DIST. 2

Pressured annulus up to 620 psi. for 30 mins Test passed/failed

REMARKS
Operated before Fall 06 Test
Well was Clean when Chart Recorder removed.
Pkr @ 9282

By [signature] (Operator Representative) Witness [signature] (NMOCD)

(Position)

Revised 02-11-02

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

MECHANICAL INTEGRITY TEST REPORT

(TA OR UIC)

Date of Test 9-17-09 Operator Key Energy Svc. API # 30-0 45-28653

Property Name Sunco Disposal Well # 1 Location: Unit E Sec 2 Twn 29 Rge 12

Land Type:
- State ____
- Federal ____
- Private ✓
- Indian ____

Well Type:
- Water Injection ____
- Salt Water Disposal ✓
- Gas Injection ____
- Producing Oil/Gas ____
- Pressure obervation ____

SWD-457

Temporarily Abandoned Well (Y/N): ____ TA Expires: ____

Casing Pres. 0
Bradenhead Pres. 0
Tubing Pres. 1520
Int. Casing Pres. N/A

Tbg. SI Pres. ____
Tbg. Inj. Pres. ____

Max. Inj. Pres. ____

RCVD SEP 17 '09
OIL CONS. DIV.
DIST. 3

Pressured annulus up to 620 psi. for 30 mins. Test passed/failed

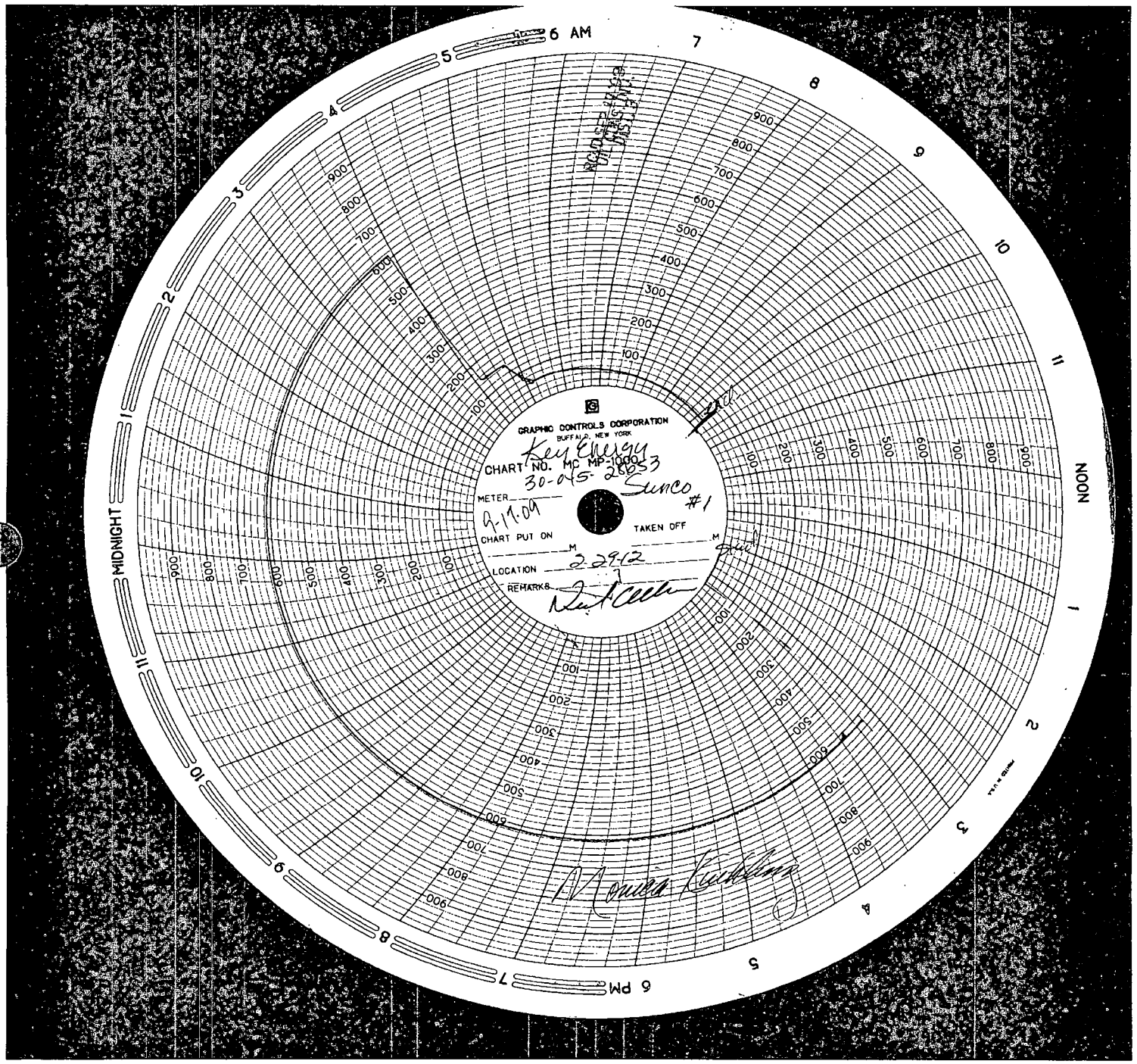
REMARKS:
1 year test before Fall 06 Test
well was clean when chart recorder released.
Pkr @ 4282'

By Neal Allen (Operator Representative)

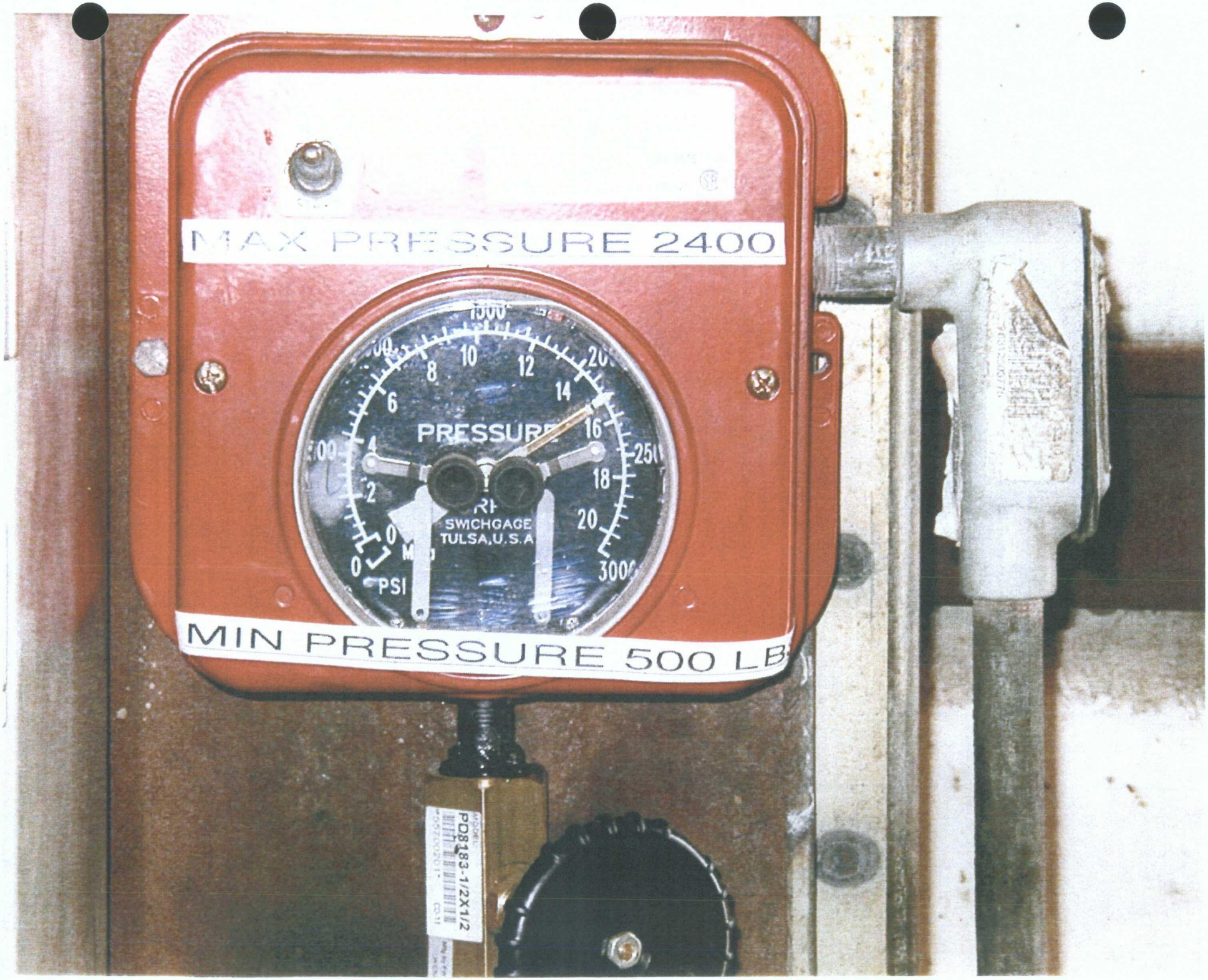
Witness Monica Kuehling (NMOCD)

(Position)

Revised 02-11-02


GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-1000
METER
CHART PUT ON
TAKEN OFF
LOCATION
REMARKS
MIDNIGHT
NOON
6 AM
6 PM

APPENDIX K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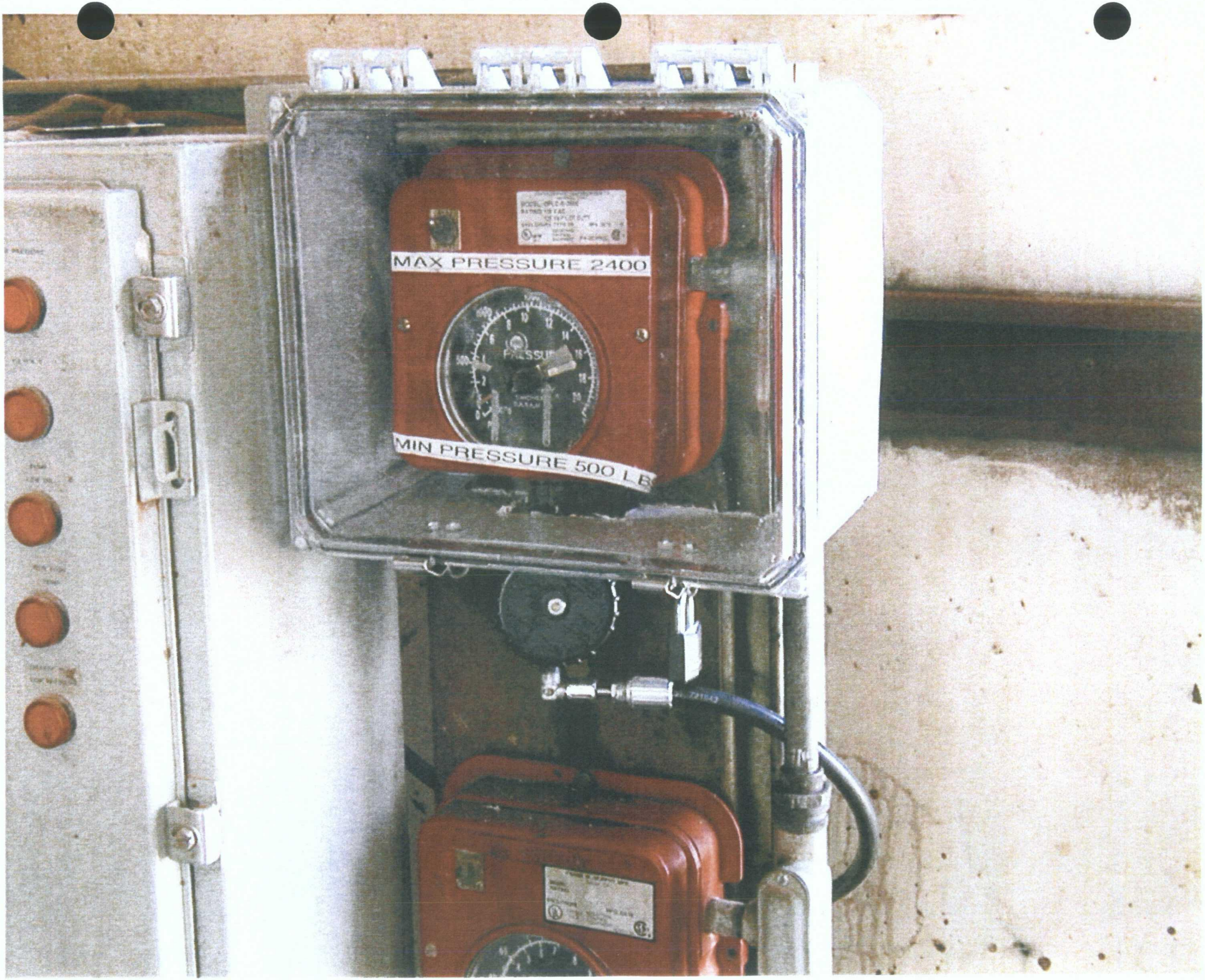
PRESSURE
SWICHGAGE
TULSA,U.S.A
PSI
MIN PRESSURE 500 LB
PD8183-1/2X1/2


MAX PRESSURE 2400
MIN PRESSURE 500 LB

APPENDIX L

Well File Search - *Select API Number to View*

Please select the API Number you wish to view from the list below by clicking the radio button next the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

SEC 1
A, E, L, M

16 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508641	O -1-29N-12W	790 FSL & 1850 FEL
Well Name & Number: PRE-ONGARD WELL No. 003		
Operator: PRE-ONGARD WELL OPERATOR		
3004508656	M -1-29N-12W	950 FSL & 800 FWL
Well Name & Number: CORNELL No. 002		
Operator: ENERGEN RESOURCES CORPORATION		
3004508661	O -1-29N-12W	1190 FSL & 1650 FEL
Well Name & Number: DUDLEY CORNELL A No. 001		
Operator: BP AMERICA PRODUCTION COMPANY		
3004508782	G -1-29N-12W	1850 FNL & 1850 FEL
Well Name & Number: CORNELL No. 005		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508783	F -1-29N-12W	1850 FNL & 1850 FWL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508793	E -1-29N-12W	1650 FNL & 990 FWL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508851	D -1-29N-12W	790 FNL & 790 FWL
Well Name & Number: ALLEN A No. 001		
Operator: BP AMERICA PRODUCTION COMPANY		
3004524129	G -1-29N-12W	1750 FNL & 1750 FEL
Well Name & Number: DUDLEY CORNELL A No. 001E		
Operator: BP AMERICA PRODUCTION COMPANY		
3004524130	K -1-29N-12W	1735 FSL & 1840 FWL
Well Name & Number: PRE-ONGARD WELL No. 1E		
Operator: PRE-ONGARD WELL OPERATOR		
3004526214	L -1-29N-12W	1450 FSL & 790 FWL
Well Name & Number: ALLEN A No. 001E		
Operator: BP AMERICA PRODUCTION COMPANY		
3004529167	G -1-29N-12W	1650 FNL & 1607 FEL
Well Name & Number: HIKE No. 001		
Operator: CHAPARRAL ENERGY LLC		
3004529538	A -1-29N-12W	970 FNL & 990 FEL

Well Name & Number: CORNELL No. 005R
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

3004529539 I -1-29N-12W 1450 FSL & 1190 FEL
Well Name & Number: CORNELL No. 003R
Operator: THOMPSON ENGR & PROD CORP

3004531612 O -1-29N-12W 760 FSL & 1750 FEL
Well Name & Number: CORNELL No. 002S
Operator: ENERGEN RESOURCES CORPORATION

3004532346 M -1-29N-12W 885 FSL & 660 FWL
Well Name & Number: CORNELL No. 002R
Operator: ENERGEN RESOURCES CORPORATION

3004534348 B -1-29N-12W 720 FNL & 2045 FEL
Well Name & Number: ALLEN COM No. 100
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

16 Records Found Displaying Screen 1 of 1

Continue Go Back

Well File Search - *Select API Number to View*

Please select the API Number you wish to view from the list below by clicking the radio button next to the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

13 Records Found Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508704	J -2-29N-12W	1650 FSL & 1650 FEL
Well Name & Number: MCGRATH B No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508713	J -2-29N-12W	1808 FSL & 1920 FEL
Well Name & Number: MCGRATH SRC No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508714	L -2-29N-12W	1810 FSL & 900 FWL
Well Name & Number: CORNELL SRC No. 007		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508797	G -2-29N-12W	1650 FNL & 1650 FEL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508839	D -2-29N-12W	990 FNL & 990 FWL
Well Name & Number: YOUNG No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508844	C -2-29N-12W	990 FNL & 1650 FWL
Well Name & Number: KATTLER No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004527635	M -2-29N-12W	1095 FSL & 1310 FWL
Well Name & Number: PRE-ONGARD WELL No. 500		
Operator: PRE-ONGARD WELL OPERATOR		
3004528653	E -2-29N-12W	1595 FNL & 1005 FWL
Well Name & Number: SUNCO DISPOSAL No. 001		
Operator: KEY ENERGY SERVICES, LLC		
3004530486	J -2-29N-12W	1705 FSL & 1450 FEL
Well Name & Number: MCGRATH SRC No. 001R		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004531580	N -2-29N-12W	840 FSL & 1550 FWL
Well Name & Number: CORNELL COM No. 500		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004532241	G -2-29N-12W	1520 FNL & 1900 FEL
Well Name & Number: BECK No. 001R		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004533573	P -2-29N-12W	760 FSL & 1135 FEL

Well Name & Number: CORNELL COM No. 500S
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

3004533811 D -2-29N-12W 1000 FNL & 955 FWL
Well Name & Number: BECK No. 001S
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

13 Records Found Displaying Screen 1 of 1

Continue Go Back

Well File Search - *Select API Number to View*

Please select the API Number you wish to view from the list below by clicking the radio button next to the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

9 Records Found Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508709	J -3-29N-12W	1650 FSL & 1650 FEL
Well Name & Number: MCGRATH No. 003		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508711	K -3-29N-12W	1650 FSL & 1650 FWL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508712	I -3-29N-12W	1720 FSL & 990 FEL
Well Name & Number: MCGRATH A No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508801	E -3-29N-12W	1650 FNL & 990 FWL
Well Name & Number: WALKER No. 001		
Operator: CONOCOPHILLIPS COMPANY		
3004508823	G -3-29N-12W	1320 FNL & 1320 FEL
Well Name & Number: WALKER SRC No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004530244	L -3-29N-12W	1675 FSL & 1165 FWL
Well Name & Number: WALKER No. 100		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004532931	F -3-29N-12W	1630 FNL & 1510 FWL
Well Name & Number: WALKER No. 100S		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004533580	B -3-29N-12W	165 FNL & 1505 FEL
Well Name & Number: MCGRATH No. 003S		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004560274	D -3-29N-12W	990 FNL & 990 FWL
Well Name & Number: WALKER No. 002		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		

9 Records Found Displaying Screen 1 of 1

Continue **Go Back**

Well File Search - *Select API Number to View*

Please select the API Number you wish to view from the list below by clicking the radio button next to the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

ONLY A, B, H,

9 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508517	J -10-29N-12W	1790 FSL & 1760 FEL
Well Name & Number: BECK A No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508523	J -10-29N-12W	1980 FSL & 1980 FEL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508601	D -10-29N-12W	1180 FNL & 790 FWL
Well Name & Number: CORNELL A No. 001		
Operator: BP AMERICA PRODUCTION COMPANY		
3004508605	C -10-29N-12W	1190 FNL & 1840 FWL
Well Name & Number: CORNELL No. 007		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004523758	A -10-29N-12W	870 FNL & 790 FEL
Well Name & Number: PRE-ONGARD WELL No. 002		
Operator: PRE-ONGARD WELL OPERATOR		
3004523889	B -10-29N-12W	870 FNL & 1760 FEL
Well Name & Number: BECK A No. 001E		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004524132	N -10-29N-12W	910 FSL & 1760 FWL
Well Name & Number: CORNELL A No. 001E		
Operator: BP AMERICA PRODUCTION COMPANY		
3004530381	B -10-29N-12W	875 FNL & 1675 FEL
Well Name & Number: CORNELL No. 100		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004534452	N -10-29N-12W	1165 FSL & 1510 FWL
Well Name & Number: BECK 29 12 10 No. 108		
Operator: SYNERGY OPERATING LLC		

9 Records Found — Displaying Screen 1 of 1

Continue | Go Back

Well File Search - *Select API Number to View*

Please select the API Number you wish to view from the list below by clicking the radio button next to the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

ONLY A, B, C, D, E, F

14 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508475	P -11-29N-12W	1090 FSL & 990 FEL
Well Name & Number: CARROLL CORNELL No. 012		
Operator: PRODUCING ROYALTIES INC		
3004508515	L -11-29N-12W	1620 FSL & 300 FWL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508558	G -11-29N-12W	1980 FNL & 1980 FEL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508615	C -11-29N-12W	790 FNL & 1850 FWL
Well Name & Number: CORNELL No. 006		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004513092	D -11-29N-12W	990 FNL & 990 FWL
Well Name & Number: CORNELL C No. 001		
Operator: BP AMERICA PRODUCTION COMPANY		
3004513218	A -11-29N-12W	990 FNL & 990 FEL
Well Name & Number: PRE-ONGARD WELL No. 010		
Operator: PRE-ONGARD WELL OPERATOR		
3004520067	O -11-29N-12W	1120 FSL & 1690 FEL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004522118	A -11-29N-12W	1120 FNL & 860 FEL
Well Name & Number: PAYNE No. 001		
Operator: PRODUCING ROYALTIES INC		
3004524133	M -11-29N-12W	860 FSL & 1120 FWL
Well Name & Number: PRE-ONGARD WELL No. 1E		
Operator: PRE-ONGARD WELL OPERATOR		
3004524447	H -11-29N-12W	1750 FNL & 1045 FEL
Well Name & Number: FEDERAL PRI No. 001E		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004529945	H -11-29N-12W	1790 FNL & 790 FEL
Well Name & Number: PAYNE No. 001R		
Operator: MCELVAIN OIL AND GAS PROPERTIES INC		
3004531503	O -11-29N-12W	790 FSL & 1850 FEL

Well Name & Number: PRE-ONGARD WELL No. 001
Operator: PRE-ONGARD WELL OPERATOR

3004531581 D -11-29N-12W 1200 FNL & 660 FWL
Well Name & Number: CORNELL No. 101
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

3004532667 I -11-29N-12W 1675 FSL & 1035 FEL
Well Name & Number: PRI No. 003
Operator: MCELVAIN OIL AND GAS PROPERTIES INC

14 Records Found Displaying Screen 1 of 1

Continue Go Back

Well File Search - *Select API Number to View*

Please select the API Number you wish to view from the list below by clicking the radio button next to the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

NONE

20 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508435	N -12-29N-12W	660 FSL & 1980 FWL
Well Name & Number: CORNELL SRC No. 003		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508444	M -12-29N-12W	790 FSL & 900 FWL
Well Name & Number: CORNELL E No. 001		
Operator: BP AMERICA PRODUCTION COMPANY		
3004508476	O -12-29N-12W	1136 FSL & 1625 FEL
Well Name & Number: CORNELL D No. 001		
Operator: BP AMERICA PRODUCTION COMPANY		
3004508488	I -12-29N-12W	1320 FSL & 1320 FEL
Well Name & Number: CARROLL CORNELL No. 006		
Operator: MCELVAIN OIL AND GAS PROPERTIES INC		
3004508513	L -12-29N-12W	1650 FSL & 330 FWL
Well Name & Number: PRE-ONGARD WELL No. 009		
Operator: PRE-ONGARD WELL OPERATOR		
3004508528	K -12-29N-12W	2200 FSL & 1980 FWL
Well Name & Number: CORNELL SRC No. 004		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508541	H -12-29N-12W	1650 FNL & 990 FEL
Well Name & Number: PRE-ONGARD WELL No. 008		
Operator: PRE-ONGARD WELL OPERATOR		
3004508598	A -12-29N-12W	990 FNL & 990 FEL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508612	D -12-29N-12W	660 FNL & 660 FWL
Well Name & Number: PRE-ONGARD WELL No. 002		
Operator: PRE-ONGARD WELL OPERATOR		
3004522119	F -12-29N-12W	1790 FNL & 1680 FWL
Well Name & Number: PAYNE No. 002		
Operator: MCELVAIN OIL AND GAS PROPERTIES INC		
3004522962	E -12-29N-12W	1800 FNL & 800 FWL
Well Name & Number: PAYNE No. 002J		
Operator: MCELVAIN OIL AND GAS PROPERTIES INC		
3004524086	A -12-29N-12W	830 FNL & 790 FEL

Well Name & Number: CORNELL D No. 001E
Operator: BP AMERICA PRODUCTION COMPANY

3004524134 F -12-29N-12W 1750 FNL & 1770 FWL
Well Name & Number: PRE-ONGARD WELL No. 1E
Operator: PRE-ONGARD WELL OPERATOR

3004524283 F -12-29N-12W 1750 FNL & 1770 FWL
Well Name & Number: CORNELL E No. 001E
Operator: BP AMERICA PRODUCTION COMPANY

3004530447 H -12-29N-12W 1640 FNL & 1030 FEL
Well Name & Number: CORNELL No. 001R
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

3004532665 E -12-29N-12W 795 FNL & 2430 FWL
Well Name & Number: PRI No. 001
Operator: MCELVAIN OIL AND GAS PROPERTIES INC

3004532666 M -12-29N-12W 765 FSL & 1105 FWL
Well Name & Number: PRI No. 002
Operator: MCELVAIN OIL AND GAS PROPERTIES INC

3004533013 J -12-29N-12W 1460 FSL & 1730 FEL
Well Name & Number: PRI No. 002S
Operator: MCELVAIN OIL AND GAS PROPERTIES INC

3004533015 A -12-29N-12W 720 FNL & 1235 FEL
Well Name & Number: PRI No. 001S
Operator: MCELVAIN OIL AND GAS PROPERTIES INC

3004534836 O -12-29N-12W 845 FSL & 1310 FEL
Well Name & Number: CARROLL CORNELL No. 006R
Operator: MCELVAIN OIL AND GAS PROPERTIES INC

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20 Records Found Displaying Screen 1 of 1

Continue Go Back

Well File Search - *Select API Number to View*

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ONLY
G, H, I, J, K, N
O, P.

10 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508939	L -34-30N-12W	1890 FSL & 800 FWL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004508945	P -34-30N-12W	870 FSL & 1190 FEL
Well Name & Number: MCGRATH C No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508950	P -34-30N-12W	990 FSL & 330 FEL
Well Name & Number: HUDSON No. 002		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004508955	N -34-30N-12W	990 FSL & 2310 FWL
Well Name & Number: PRE-ONGARD WELL No. 002		
Operator: PRE-ONGARD WELL OPERATOR		
3004509052	F -34-30N-12W	1250 FNL & 2310 FWL
Well Name & Number: PRE-ONGARD WELL No. 001		
Operator: PRE-ONGARD WELL OPERATOR		
3004509071	D -34-30N-12W	790 FNL & 1015 FWL
Well Name & Number: DUFF GAS COM No. 001		
Operator: XTO ENERGY, INC		
3004525923	B -34-30N-12W	800 FNL & 1730 FEL
Well Name & Number: MCGRATH No. 004		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004526141	G -34-30N-12W	1770 FNL & 1480 FEL
Well Name & Number: DUFF GAS COM No. 001E		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004531756	D -34-30N-12W	750 FNL & 995 FWL
Well Name & Number: JULANDER No. 100		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004533411	M -34-30N-12W	810 FSL & 730 FWL
Well Name & Number: JULANDER No. 100S		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		

10 Records Found — Displaying Screen 1 of 1

Continue | Go Back

Well File Search - *Select API Number to View*

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NOT A, B, C, D, H

5 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508946	P -35-30N-12W	990 FSL & 990 FEL
Well Name & Number: CARNAHAN COM No. 001		
Operator: HOLCOMB OIL & GAS INC		
3004511770	E -35-30N-12W	1750 FNL & 990 FWL
Well Name & Number: HUDSON J No. 003		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004520140	L -35-30N-12W	1600 FSL & 1150 FWL
Well Name & Number: PRE-ONGARD WELL No. 004		
Operator: PRE-ONGARD WELL OPERATOR		
3004525844	P -35-30N-12W	1090 FSL & 1070 FEL
Well Name & Number: CARNAHAN COM No. 002		
Operator: MERRION OIL & GAS CORP		
3004531355	A -35-30N-12W	1275 FNL & 1205 FEL
Well Name & Number: CARNAHAN COM No. 001Y		
Operator: HOLCOMB OIL & GAS INC		

5 Records Found — Displaying Screen 1 of 1

Continue | Go Back

Well File Search - *Select API Number to View*

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ONLY L, M

6 Records Found — Displaying Screen 1 of 1

API Number	ULSTR	Footages
3004508986	I -36-30N-12W	1650 FSL & 1100 FEL
Well Name & Number: STATE COM AH No. 030		
Operator: CONOCOPHILLIPS COMPANY		
3004512188	E -36-30N-12W	1850 FNL & 790 FWL
Well Name & Number: NEW MEXICO COM N No. 001		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004524037	N -36-30N-12W	1000 FSL & 1640 FWL
Well Name & Number: STATE COM AH No. 030E		
Operator: CONOCOPHILLIPS COMPANY		
3004528177	M -36-30N-12W	1140 FSL & 1220 FWL
Well Name & Number: FC STATE COM No. 024		
Operator: CONOCOPHILLIPS COMPANY		
3004531074	A -36-30N-12W	665 FNL & 665 FEL
Well Name & Number: NEW MEXICO COM N No. 100		
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP		
3004535163	I -36-30N-12W	1643 FSL & 985 FEL
Well Name & Number: FC STATE COM No. 024S		
Operator: CONOCOPHILLIPS COMPANY		

6 Records Found — Displaying Screen 1 of 1

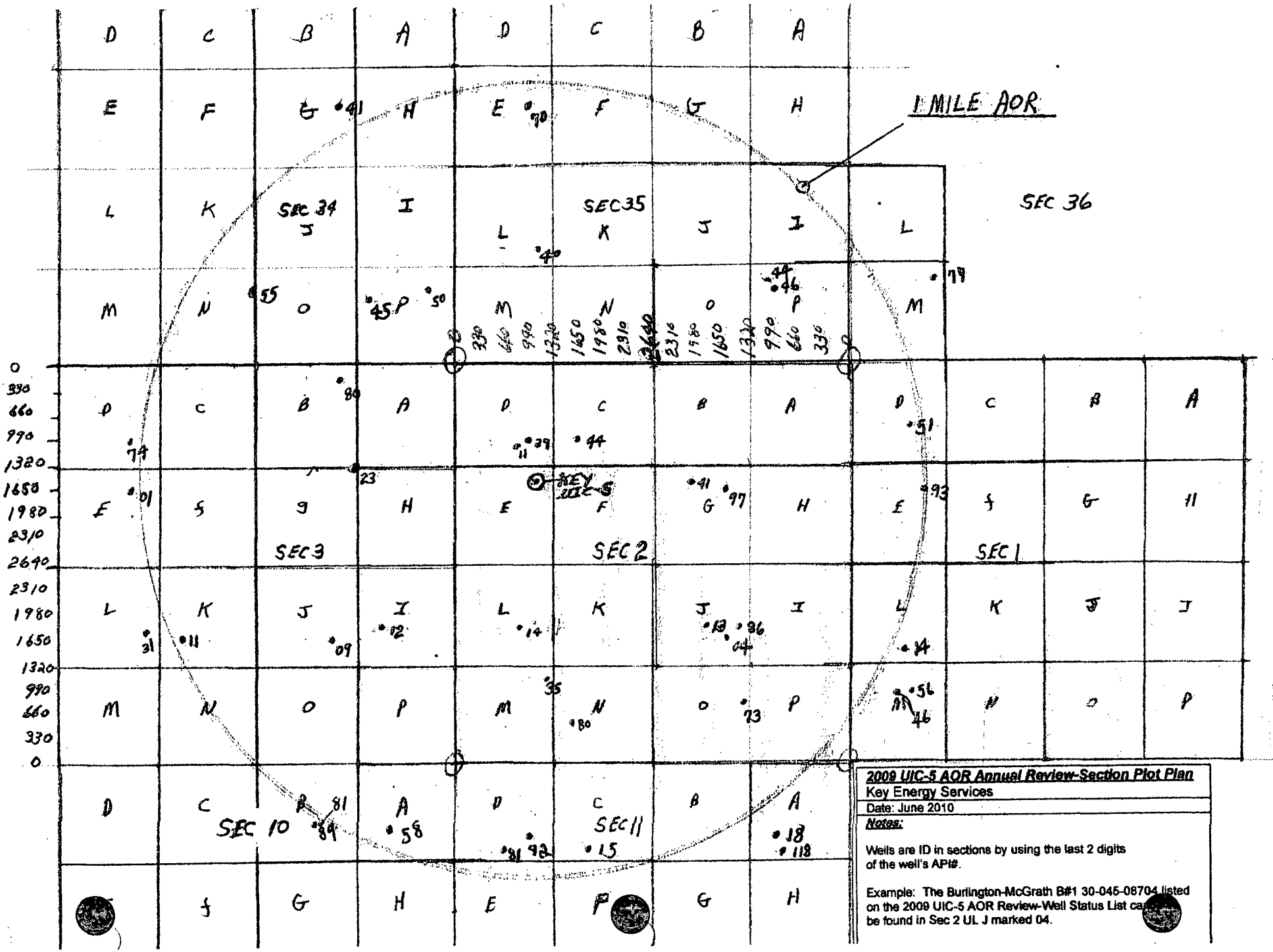
Continue | Go Back

2009 UIC-5 AOR Review--Well Status List

	API#	*Well Name*	*UL*	*SEC*	*Ts*	*Rg*	*Footage*	**Within** *1 mile*	*Well Status*	Well Depth (ft) *Injection/Prod*	Casing Program *Checked*	Cased/Cemented across Injection Zone	Corrective Action Required
	30-045-28653	***Key-Sunco #1***	***E***	***2***	***29n***	***12w***	***1595 FNL & 1005 FWL***	NA	active	4380'-4480'	na	na	na
1	30-45-08704	Burlington-McGrath B #1	J	2	29n	12w	1650 FSL & 1650 FEL	yes	active	TD 2137	yes	na	none
2	30-45-08713	Burlington-McGrath SRC #1	j	2	29n	12w	1808 FSL & 1920 FEL	yes	active	TD 2015	yes	na	none
3	30-45-08714	Burlington-Cornell SRC #7	L	2	29n	12w	1810 FSL & 900 FWL	yes	active	TD 2100	yes	na	none
4	30-45-08797	pre-ongard	g	2	29n	12w	1650 FNL & 1650 FEL	yes	P&A	TD 2125	yes	na	none
5	30-45-08839	Burlington-Young #1	d	2	29n	12w	990 FNL & 990 FWL	yes	active	TD 1500	yes	na	none
6	30-45-08844	Burlington-Kattler #1	c	2	29n	12w	990 FNL & 1650 FWL	yes	active	TD 2045	yes	na	none
7	30-45-27635	pre-ongard	m	2	29n	12w	1095 FSL & 1310 FWL	yes	unknown	TD 1879	no	na	none
8	30-45-30486	Burlington-McGrath SRC #1R	j	2	29n	12w	1705 FSL & 1450 FEL	yes	active	TD 2218	yes	na	none
9	30-45-31580	Burlington-Cornell #500	n	2	29n	12w	840 FSL & 1550 FWL	yes	active	TD 2136	yes	na	none
10	30-45-32241	Burlington-Beck #1R	g	2	29n	12w	1520 FNL & 1900 FEL	yes	active	TD 2225	yes	na	none
11	30-45-33573	Burlington-Cornell #500s	p	2	29n	12w	760 FSL & 1135 FEL	yes	active	TD 2162	yes	na	none
12	30-45-33811	Burlington-Beck #1s	d	2	29n	12w	1000 FNL & 955 FWL	yes	active	TD 2148	yes	na	none
13	30-045-08656	Energen-Cornell #2	m	1	29n	12w	950 FSL & 800 FWL	no	na	na	na	na	none
14	30-045-08793	pre-ongard	e	1	29n	12w	1650 FNL & 990 FWL	yes	P&A	TD 2186	yes	na	none
15	30-045-08851	BP -Allen A #1s	d	1	29n	12w	790 FNL & 790 FWL	yes	active	***TD 6786***	yes	yes	***Review recommended***
16	30-045-26214	BP -Allen A #1E	L	1	29n	12w	1450 FSL & 790 FWL	no	na	na	na	na	na
17	30-045-32346	Energen-Cornell #2R	m	1	29n	12w	885 FSL & 660 FWL	no	na	na	na	na	na
18	30-045-08709	Burlington-McGrath #3	j	3	29n	12w	1650 FSL & 1650 FEL	yes	active	TD 2011	yes	na	none
19	30-045-08711	pre-ongard	k	3	29n	12w	1650 FSL & 1650 FWL	yes	P&A	TD 2100	yes	na	none
20	30-045-08712	Burlington-McGrath A#1	i	3	29n	12w	1720 FSL & 990 FEL	yes	active	***TD 6710***	yes	yes	none
21	30-045-08801	Conoco-Phillip #1s Walker	e	3	29n	12w	1650 FNL & 990 FWL	no	na	na	na	na	na
22	30-045-08823	Burlington-Walker SCR #1	g	3	29n	12w	1320 FNL & 1320 FEL	yes	active	TD 2058	yes	na	none
23	30-045-30244	Burlington-Walker #1	L	3	29n	12w	1675 FSL & 1165 FWL	yes	active	TD 1940	yes	na	none
24	30-045-32931	Burlington-Walker #100S	f	3	29n	12w	1630 FNL & 1510 FWL	no	na	na	na	na	na
25	30-045-33580	Burlington-McGrath #3s	b	3	29n	12w	165 FNL & 1505 FEL	yes	active	TD 2066	yes	na	none
26	30-045-60274	Burlington-Walker #2	d	3	29n	12w	990 FNL & 990 FWL	no	na	na	na	na	na
27	30-045-23758	pre-ongard well #2	a	10	29n	12w	870 FNL & 790 FEL	yes	active	TD 1848	yes	na	none
28	30-045-23889	Burlington-Beck A#1E	b	10	29n	12w	870 FNL & 1760 FEL	no	na	na	na	na	na
29	30-045-30381	Burlington-Cornell #100	b	10	29n	12w	875 FNL & 1675 FEL	no	na	na	na	na	na
30	30-045-08615	Burlington-Cornell #6	c	11	29n	12w	790 FNL & 1850 FWL	yes	yes	TD 2020	yes	yes	none
31	30-045-13092	BP -Cornell C #1s	d	11	29n	12w	990 FNL & 990 FWL	yes	active	***TD 6640***	yes	yes	***Review recommended***
32	30-045-13218	pre-ongard#10	a	11	29n	12w	990 FNL & 990 FEL	no	na	na	na	na	na
33	30-045-22118	Producing Royalties Inc-Pnyne #1	a	11	29n	12w	1120 FNL & 860 FEL	no	na	na	na	na	na
34	30-045-31581	Burlington-Cornell #101	d	11	29n	12w	1200 FNL & 660 FWL	yes	active	TD 2000	yes	na	none
35	30-045-08945	Burlington-McGrath C#1	p	34	30n	12w	870 FSL & 1190 FEL	yes	active	***TD 6605***	yes	yes	none
36	30-045-08950	Burlington-Hudson #2	p	34	30n	12w	990 FSL & 330 FEL	yes	active	TD 1961	yes	na	none
37	30-045-08955	pre-ongard#2	n	34	30n	12w	990 FSL & 2310 FWL	yes	P&A	TD 2000	yes	na	none
38	30-045-26141	Burlington-Duff Gas com #1E	g	34	30n	12w	1770 FNL & 1480 FEL	no	na	na	na	na	na
39	30-045-08946	Holcomb O&G-Carnahan	p	35	30n	12w	990 FSL & 990 FEL	yes	P&A	***TD 6800***	yes	yes	***Review recommended***
40	30-045-11770	Burlington-Hudson J #3	e	35	30n	12w	1750 FNL & 990 FWL	yes	active-recomp	***TD 6750***	yes	yes	***Review recommended***
41	30-045-20140	pre-ongard#4	I	35	30n	12w	1600 FSL & 1150 FWL	yes	P&A	TD 2121	yes	na	none
42	30-045-25844	Merrion O&G-Carnaham com#2	p	35	30n	12w	1090 FSL & 1070 FEL	yes	active-gas well	***TD 6777***	yes	yes	none
43	30-045-28177	Conoco-Phillip FC ST com#24	m	36	30n	12w	1140 FSL & 1220 FWL	no	na	na	na	na	na

Notes:

P&A Plugged and Abandoned



2009 UIC-5 AOR Annual Review-Section Plot Plan

Key Energy Services

Date: June 2010

Notes:

Wells are ID in sections by using the last 2 digits of the well's API#.

Example: The Burlington-McGrath B#1 30-045-08704 listed on the 2009 UIC-5 AOR Review-Well Status List can be found in Sec 2 UL J marked 04.

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

WELL API NO. 30-045-08851

5. Indicate Type of Lease: STATE FEE XX

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: Allen A

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator: BP America Production Company Attn: Cherry Hlava, Room 19.178

8. Well No. 1

3. Address of Operator: P.O. Box 3092 Houston, TX 77253

9. Pool name or Wildcat: Basin Dakota

4. Well Location

Unit Letter D 790 feet from the North line and 790 feet from the West line

Section 1 Township 29N Range 12W NMPM San Juan County

10. Elevation (Show whether DR, RKB, RT, GR, etc.) 5906'

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPLETION ☐	CASING TEST AND CEMENT JOB ☐	
OTHER:		OTHER: Casing Repair	☒

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Please see attached.

RECEIVED
OCT 28 2002
OIL CONSERVATION DIVISION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Cherry Hlava TITLE Regulatory Analyst DATE 10/14/2002

Type or print name Cherry Hlava Telephone No. 281-366-4081

(This space for State use)

APPPROVED BY Charlie Perrin TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE OCT 18 2002

Conditions of approval, if any:

3/13/93-3/17/93
PMP 30 BW down TBG & kill gas. TOH w/ TBG. RIH & tag fill @ 6710'. Log out of hole and through sections where bad CSG suspected w/ Blue Jet. TIH w/ RBP & RTTS. Set RBP @ 6300'. Load hole down TBG and PMP 80 BBLS of 2% KCL H2O & estab. circulation. Pump total of 131 BBLS to load hole above BP @ 6300'. With PKR hanging above RBP, pressure test hole from top to establish rate of 1.5 BPM and 500 PSI. Set PKR @ 6295' & pressure test TBG & RBP to 1500 PSI. Held ok. Drop 1 sack of sand on RBP & displace. TOH to 4363' & set RTTS. Pressure test CSG from 4363' to 6300' @ 1000 PSI. CSG held with no leakoff. Release PKR & equalize.

3/18/93-3/24/93
Isolate CSG leaks w/ RTTS PKR & found lower hole between 4023' & 4055'. IR into hole was 1.5 BPM @ 400 PSI. 2nd hole was found @ 1703' to 1719'. Hole bled to 300-400 PSI in one minute from 1000 PSI test. Reset PKR @ 4100' and test CSG from 4100' to 6300' @ 1000 PSI. Held ok. Ran CBL/VDL from 6200' to surface. TIH w/ RTTS & PKR @ 3681'. Circ. and load hole. Pressure test PKR & annulus to 500 PSI. Mix & PMP 5 BW ahead of 150 sx class B. Pressure increased slowly from 300 to 900. Displaced CMT from surface to 3900' & achieved 875 PSI on squeeze. Squeeze designed to cover top of Cliff House FM w/CMT to 3670'. Release PKR @ 3681' & TOH. Tag CMT @ 3855' & drill to 4017'. TIH w/RTTS & set @ 1880'. Pressure test CSG from 1880' to 6300' @ 1000 PSI. Held ok. TOH w/ PKR. Ran CBL across Squeeze. 0 pressure pass showed CMT in hole @ 4008'. 500 PSI pass showed good bond isolation @ top of Cliff House from 3650' to 2700'.

3/25/93-3/29/93
Perf squeeze hole @ 2060' w/ 2 holes. TIH w/ RTTS & set PKR @ 1814'. Squeeze @ 2.5 BPM @ 1000 PSI. CMT squeeze w/ 75 sx class B. Mix & displace @ 1.75 BPM & 475 PSI. Pressure climbed to 1000. Final pressure @ 800 PSI. WOC. Pressure did not hold @ 500 PSI. Bled to 300 in 1 minute. WOC. Pressured up to 650 PSI. Held ok. Release pressure & PKR. TOH w/ RTTS. Perf squeeze holes @ 1720'. TIH to 1437', set PKR & test PKR to 500 PSI. Test ok. Establish rate into holes @ 1720' @ 1.5 BPM & 700 PSI. Squeeze holes w/ 75 sx class B. Max. pressure 800 PSI. Displaced to 1620'. Tag Cmt @ 1644', drill to 1740', circulate hole clean. Pressure tested squeeze to 500 PSI. Bled to 250 in 5 minutes. Retest to 200 PSI, bled to 100 in 5 Minutes. TOH. TIH Circ. & spot 19 sx class B in a 250' plug from 1747' to 1500'. Load hole & squeeze 1 BBL CMT into hole. Final squeeze pressure of 800 PSI. WOC. Tag CMT @ 1543'. Drill to 1740'. Pressure test to 500 PSI. Held ok. Circ. hole clean. Tag CMT @ 1996', drill to 2068'. Circ. clean. Pressure test squeeze hole @ 2060'. Bled 20% in 15 minutes. 2nd test pressure dropped from 520 to 360 PSI in 15 minutes. TIH & spot 19 sx class B CMT from 2089' to 1839'. Stage .5 BBLS of CMT into hole @ 2060' w/ 500 PSI. SI well in w/ 500 PSI & WOC.

3/30/93-4/2/93
Tag CMT @ 1860' Drill out to 2088'. Circ. hole clean. Pressure test well bore from surface to 6300' @ 560 PSI. Held pressure for 15 minutes. Circ. sand off BP. Swab. Catch BP @ 6300' & open bypass. Pumped 20 BBLS water to kill TBG. TOH W/ RBP. Tag Sand @ 6708', clean & land TBG @ 6644'. Release rig.

If there are any questions, please contact Ed Hadlock @ (303) 830-4982.

REPAIR CASING LEAK SUBSEQUENT REPORT
ALLEN A 1
10/14/02

9/24/02 Spot Rig. CSG 900 psi, Tbg 760 psi, BH 0 psi. Run in slickline & tag @6598'. Lay Flow Line to tnk & Blw DN CSG. TIH & set CIBP inside 2 3/8" @6610'. NDWH, NUBOP SDFN.

9/25/02 RU & swab tbg dry. TOH w/tbg. TIH w/bit & scraper to 6400'. TOH w/same. SDFN.

9/26/02 Attempt to set CIBP @6330'. Cmt in RBP. PU bit & watermelon mill & string float. TIH w/43 stands. C/O to 6390'. SDFN.

9/27/02 TIH to 6400' w/bit $ Wtrmellon mill. RU pwr swivel. C/O to 6720' w/air - mist & run sweeps. TOH w/mill & bit. SDFN.

9/30/02 TIH w/guage ring & junk basket & CCL to 6420'. TOH w/GR/JB. Run CCL/RBP & set @6390'. TOH & RD-WL. TIH w/pkr. Fill hole w/2% KCL. Press tst CVSG to 380 psi, bled off 120 psi in 5 mins. TIH w/12 stds, tst held. TOH w/12 stds, Test held. TOH w/6 stands, no tst. Isolate leak. Hole 4203' to 4235'.

10/01/02 TOH w/pkr. TIH w/openended tbg to 4262' & spot a 162' balanced cmt plug from 4100' - 4262' w/14 sxs cl B cmt & 2% CACL, 15.6 ppg, 1.28 yield bbls H2O. Pull 5 stands, reverse w/20 bbls H2O. Pull 3 stands. Pressure to 500 psi. No bleed off. SI w/400 psi. SDFN.

10/2/02 CSG 220 psi; TBG 220 psi, bled off pressure. TOH w/Tbg. TIH w/bit & tag.cmt from 4040' - 4270'=230'. Pressure test csg. Dropped 100 psi in 15 min. TOH w/bit, SDFN.

10/3/02 cleaning

10/4/02 cleaning

10/7/02 TIH w/bit; tag cmt @4200'. D/O cmt. Press tst to 300# held ok. TOH. TIH w/csg scrapper. TOH.

10/8/02 TIH / unload hole. Clean off RBP latch on clean off RBP. TOH tbg. / RBP. TIH mule shoe / SN / TBG. SDFN.

10/9/02 TIH RU get circ. / C/O fill. TIH & land tbg @6672'. ND BOP NU WH RU circ hole. RDSU.

10/10/02 RDMO location

Submit 3 Copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-103
Revised 1-1-89

WELL API NO. 3004508851

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: Allen /A/

1. Type of Well: OIL WELL ☐ GAS WELL ☒ OTHER

2. Name of Operator: Amoco Production Company — Attention: Ed Hadlock

8. Well No. 1

3. Address of Operator: P.O. Box 800 Denver Colorado 80201 (303) 830-4982

9. Pool name or Wildcat: Basin Dakota

4. Well Location: Unit Letter D : 790 Feet From The North Line and 790 Feet From The West Line

Section 1 Township 29N Range 12W NMPM San Juan County

10. Elevation *(Show whether DF, RKB, RT, GR, etc.)* 5906'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐			CASING TEST AND CEMENT JOB	☐		
OTHER:	☐			OTHER: Casing Repair	☒		

12. Describe Proposed or Completed Operations *(Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)* SEE RULE 1103.

PLEASE SEE ATTACHED.

RECEIVED APR 26 1993 OIL CON. DIV. DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Ed Hadlock TITLE Business Analyst DATE 04-22-1993

TYPE OR PRINT NAME Ed Hadlock TELEPHONE NO. (303) 830-4982

(This space for State Use)

APPROVED BY Charles G Holson TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE APR 26 1993

CONDITIONS OF APPROVAL, IF ANY:

3/13/93-3/17/93
PMP 30 BW down TBG & kill gas. TOH w/ TBG. RIH & tag fill @ 6710'. Log out of hole and through sections where bad CSG suspected w/ Blue Jet. TIH w/ RBP & RTTS. Set RBP @ 6300'. Load hole down TBG and PMP 80 BBLS of 2% KCL H2O & estab. circulation. Pump total of 131 BBLS to load hole above BP @ 6300'. With PKR hanging above RBP, pressure test hole from top to establish rate of 1.5 BPM and 500 PSI. Set PKR @ 6295' & pressure test TBG & RBP to 1500 PSI. Held ok. Drop 1 sack of sand on RBP & displace. TOH to 4363' & set RTTS. Pressure test CSG from 4363' to 6300' @ 1000 PSI. CSG held with no leakoff. Release PKR & equalize.

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If there are any questions, please contact Ed Hadlock @ (303) 830-4982.

(Form C-102)
(Revised 7/1/52)

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS NOTICES

Submit this notice in TRIPLICATE to the District Office, Oil Conservation Commission, before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Notice by Checking Below

NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO TEMPORARILY ABANDON WELL		NOTICE OF INTENTION TO DRILL DEEPER	
NOTICE OF INTENTION TO PLUG WELL		NOTICE OF INTENTION TO PLUG BACK		NOTICE OF INTENTION TO SET LINER	
NOTICE OF INTENTION TO SQUEEZE		NOTICE OF INTENTION TO ACIDIZE		NOTICE OF INTENTION TO SHOOT (Nitro)	
NOTICE OF INTENTION TO GUN PERFORATE		NOTICE OF INTENTION (OTHER)		NOTICE OF INTENTION (OTHER) Remedial Work after casing failure	X

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Durango, Colorado (Place) April 27, 1961 (Date)

Gentlemen:

Following is a Notice of Intention to do certain work as described below at the Tenneco Corporation (Company or Operator) Allen Dakota Gas Unit "A" Lease Well No. 1 in D (Unit)

NE ¼ NE ¼ (40-acre Subdivision) of Sec. 1, T. 29N, R. 12W, NMPM., Basin Dakota Pool

San Juan County.

FULL DETAILS OF PROPOSED PLAN OF WORK

(FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS)

We propose the following procedure to correct casing failure which occurred during completion operations. $4\frac{1}{2}$" Production casing failed at 2275', which was below the stage collar.

1. Wash over and remove damaged $4\frac{1}{2}$" 9.5# casing to an approximate depth of 2315'.
2. Run approximately 2315' casing, $4\frac{1}{2}$", 11.6# and 9.5# and attach by means of Bowen Casing Bowl.
3. Set stage collar at approximately 2275' and recement Pictured Cliffs.

RECEIVED
MAY 1 1961
OIL CON. COM.
DIST. 3

Approved MAY 1 1961, 19
Except as follows:

Approved
OIL CONSERVATION COMMISSION
By Emery C. Arnold
Title Supervisor Dist. # 3

Tenneco Corporation acting by and through its managing agent Tenneco Oil Company.
Company or Operator

By L. B. Plumb
Position District Production Superintendent
Send Communications regarding well to:
Name L. B. Plumb
Address P. O. Box 1714 Durango, Colorado

Submit 3 Copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O.Box 2088
Santa Fe, New Mexico 87504-2088

Form C-103
Revised 1-1-89

OIL CONSERVATION DIVISION
RECEIVED
93 FEB 23 AM 8 52

WELL API NO. 30-045-08851	
5. Indicate Type of Lease	STATE [XX] FEE [ ]
6. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: ALLEN A

1. Type of Well: OIL WELL [ ] GAS WELL [XX] OTHER

2. Name of Operator: AMOCO PRODUCTION COMPANY ATTN: ED HADLOCK

8. Well No.: 1

3. Address of Operator: P.O. BOX 800, DENVER, CO 80201 (303) 830-4982

9. Pool name or Wildcat: BASIN DAKOTA

4. Well Location
Unit Letter D : 790 Feet From The NORTH Line and 790 Feet From The WEST Line
Section 1 Township 29N Range 12W NMPM SAN JUAN County

10. Elevation (Show whether DF, RKB, RT, GR, etc.) 5906' GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]	CHANGE PLANS [ ]	COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]		CASING TEST AND CEMENT JOB [ ]	
OTHER: CASING LEAK [XX]		OTHER: [ ]	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

WELL STARTED PRODUCING MUD. CHECK FOR CASING LEAK AND REPAIR IF ECONOMICALLY FEASIBLE. SEE ATTACHED PROCEDURES.

RECEIVED
FEB 16 1993
OIL CON. DIV.
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Ed Hadlock TITLE BUSINESS ANALYST DATE

TYPE OR PRINT NAME ED HADLOCK TELEPHONE NO. (303) 830-4982

(This space for State Use)

APPROVED BY [signature] TITLE SUPERVISOR DISTRICT # 3 DATE FEB 16 1993

CONDITIONS OF APPROVAL, IF ANY:

Rec CIR

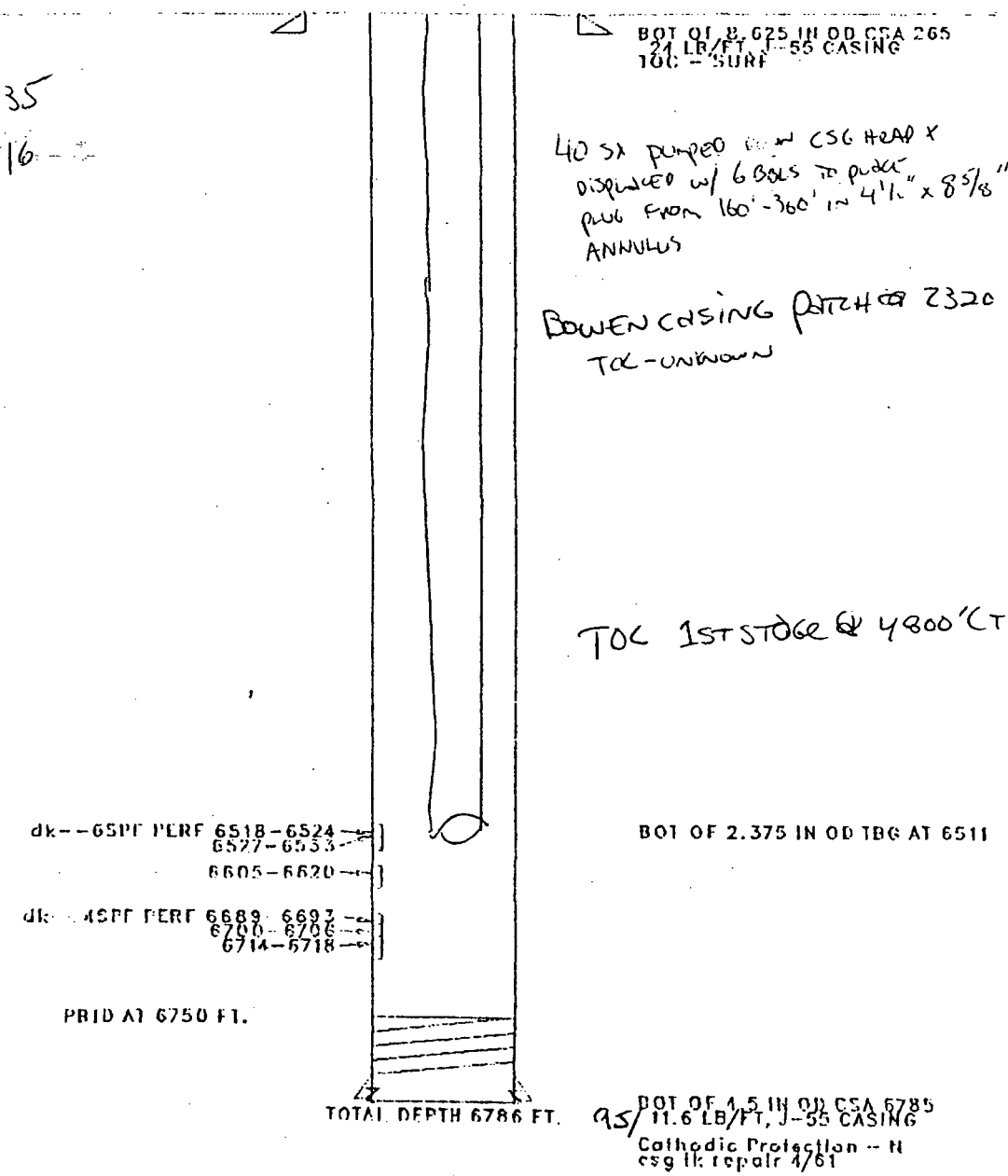
ALLEN A #1
SECTION 1D-29N-12W
SAN JUAN COUNTY, NM
WORKOVER PROCEDURES

OBJECTIVE: CHECK FOR CASING LEAK AND DEPENDING ON RESULTS, REPAIR OR PLUG AND ABANDON THE WELL.

1. RECORD TUBING, CASING X BRADENHEAD PRESSURES.
2. LOCATE ANCHORS X TEST. INSTALL ANCHORS, IF NECESSARY.
3. MI X RUSU.
4. BLOW DOWN WELL.
5. NDWH. NUBOP.
6. PICK UP TBG X TAG PBTD AT 6750'. TOOH W/2-3/8" TBG. VISUALLY INSPECT X REPLACE BAD JOINTS.
7. RIH W/SCRAPER TO 6400'. (NOTE: BOWEN CSG PATCH AT 2320'.) POOH.
8. RIH W/RBP X PKR X SET RBP AT 6300'. PULL UP ONE STAND, SET PKR X TEST PLUG TO 1000 PSIG.
9. TEST BACKSIDE TO 1500 PSIG. IF BACKSIDE TESTS OK, CONTINUE. OTHERWISE, ISOLATE BAD CASING X ESTABLISH RATE X PRESSURE INTO LEAK.
10. CONTACT SANDI BRAUN (X5245) W/RESULTS.
11. ADDITIONAL PROCEDURES WILL FOLLOW BASED ON RESULTS.

KT 825
PC 2058
MN 4160
PL 4410
MAN 4735
OAK 6516

ALLEN A 001 667
Location -- 1D- 29N-12W
SINGLE dk
Orig.Completion - 5/61
Last File Update - 1/89 by BCB



95/

4/61 - CSG LEAK, FISHED OUT 4 1/2" CSG, RAN repair STRING X PERFORATED (FAILED CSG), RAN NEW CSG TO 2320'

NUMBER OF COPIES RECEIVED		
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U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
PRORATION OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company	Address
Tenneco Corporation	P. O. Box 1714, Durango, Colorado

Lease	Well No.	Unit Letter	Section	Township	Range
Allen Dakota Gas Unit "A"	1	D	1	29 N	12 W

Date Work Performed	Pool	County
April 1, 1961	Basin Dakota	San Juan

THIS IS A REPORT OF: *(Check appropriate block)*

- [ ] Beginning Drilling Operations
- [x] Casing Test and Cement Job
- [ ] Other *(Explain)*:
- [ ] Plugging
- [ ] Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Running and cementing production casing as follows:

Ran 1 joint 34', casing 5" OD, 13#, J-55 and 210 joints 6820' casing 4-1/2" OD, 9.5#, J-55, set at 6780'. Stage collar set at 2275' and cemented in two stages. First stage - cemented with 200 sacks Diamix, 6% gel and 50 sacks Diamix, 2% gel. Plug down on first stage 5:45 p.m. 4-1-61. WOC 1 hour. Second stage - Cemented with 50 sacks Diamix 6% gel. Plug down on second stage 8:45 p.m. 4-1-61. WOC 24 hours. Pressure tested casing to 3000 pounds, for 30 minutes. Pressure held o.k.

RECEIVED
APR 27 1961
OIL CON. COM.
DIST. 3

Witnessed by	Position	Company
R. F. Baker	Operations Foreman	Tenneco Corporation

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	PBTD	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved by Emery C. Arnold	Name L. B. Plumb
Title APR 27 1961	Position District Production Superintendent
Date Supervisor Dist. # 3	Company Tenneco Corporation

API # 30-045-08712

NUMBER OF COPIES RECEIVED		
DISTRIBUTION		
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FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
PRORATION OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

N.

X

AREA 640 ACRES
LOCATE WELL CORRECTLY

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copies

Aztec Oil & Gas Company (Company or Operator) NORBATH "A" (Lease)

Well No. 1, in NE ¼ of SE ¼, of Sec. 3, T. 29N, R. 12W, NMPM.

Basin Dakota Pool, San Juan County.

Well is 1720 feet from South line and 990 feet from East line of Section 3. If State Land the Oil and Gas Lease No. is Patented

Drilling Commenced 3-14, 19 64. Drilling was Completed 3-29, 19 64.

Name of Drilling Contractor Aztec

Address

Elevation above sea level at Top of Tubing Head The information given is to be kept confidential until , 19

OIL SANDS OR ZONES

No. 1, from 6432 to 6440 No. 4, from to

No. 2, from 6452 to 6456 No. 5, from to

No. 3, from 6504 to 6524 No. 6, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8"	24#	New	9 jts.				
4 1/2"	9.5 & 11.6	New	213 jts.				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
7 7/8	4 1/2"	6638	500 sacks			

RECEIVED
APR 15 1964
OIL CON. COM.
DIST. 3

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Frac'd well with 62,070 gals treated wtr; 60,000 # 20-40 sd; 10,000# 10-20 sand

Result of Production Stimulation No ID pressure; Max. press. 3400#; Minimum pressure 2800#; Average treating pressure 3100#; AIR 41.5 BPM; ISIP 1200#; SI 5 min. 800#

Flushed w/ 1500 gals wtr treated w/1% caclz & 20#/ 1000 gals WACS Depth Cleaned Out 6552'

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from surface feet to 6689 feet, and from ..... feet to ..... feet.

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet.

PRODUCTION

Put to Producing ....., 19.....

OIL WELL: The production during the first 24 hours was ..... barrels of liquid of which ..... % was was oil; ..... % was emulsion; ..... % water; and ..... % was sediment. A.P.I. Gravity .....

GAS WELL: The production during the first 24 hours was 1793 M.C.F. plus ..... barrels of liquid Hydrocarbon. Shut in Pressure ..... lbs.

Length of Time Shut in 4-7-64 to 4-14-64

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico
T. Anhy	T. Devonian	T. Ojo Alamo
T. Salt	T. Silurian	T. Kirtland-Fruitland
B. Salt	T. Montoya	T. Farmington
T. Yates	T. Simpson	T. Pictured Cliffs
T. 7 Rivers	T. McKee	T. Menefee
T. Queen	T. Ellenburger	T. Point Lookout
T. Grayburg	T. Gr. Wash	T. Mancos
T. San Andres	T. Granite	T. Dakota
T. Glorieta	T.	T. Morrison
T. Drinkard	T.	T. Penn
T. Tubbs	T.	T.
T. Abo	T.	T.
T. Penn	T.	T.
T. Miss	T.	T.

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0		260	Sand & Shale				Log Tops:
260		694	Sand & Shale				
694		3278	Sand & Shale				Pictured Cliffs 1953
3278		3797	Sand & Shale				Cliff House 3526
3797		4222	Sand & Shale				Point Lookout 4250
4222		4960	Sand & Shale				Gallup 5592
4960		5464	Sand & Shale				Greenhorn 6328
5464		6017	Sand & Shale				Graneros 6378
6017		6549	Sand & Shale				Dakota 6502
6549		6556	Sand				
6556		6689	Sand & Shale				
6689		Total Depth					

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

4-13-64
(Date)

Company or Operator Aztec Oil & Gas Company Address Drawer 570, Farmington, New Mexico

ORIGINAL SIGNED BY JOE C. SALMON

Name Joe C. Salmon Position or Title District Superintendent

NUMBER OF COPIES RECEIVED		
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TRANSPORTER OIL / GAS		
PRORATION OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company	Address
Aztec Oil & Gas Company	Drawer #570, Farmington, New Mexico

Lease	Well No.	Unit Letter	Section	Township	Range
McGRATH	"A" 1	I	3	29N	12W

Date Work Performed	Pool	County
3-30-64	Basin Dakota	San Juan

THIS IS A REPORT OF: *(Check appropriate block)*

- [ ] Beginning Drilling Operations
- [x] Casing Test and Cement Job
- [ ] Other *(Explain)*:
- [ ] Plugging
- [ ] Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Total depth 6689'
Ran 213 joints 4½" casing 6678' landed at 6688'.
Cemented first stage w/200 sacks 50-50 pozmix Class "C" w/1/2#/sk tic.
Cemented second stage w/150 sacks Class "C" 50-50 pozmix 6% gal & 3/4#/sk tic.
Cemented third stage w/150 sacks 50-50 pozmix Class "C" w/6% gal & 1/2#/sk tic.
Pressured w/3000# pressure. OK
Perforated w/4 shots/ft 6432-6440'; 6452-6456; 6504-6524
Fractured w/62,070 gals. treated water; 60,000# 20-40 sd; 10,000# 10-20 sd
No Breakdown Pressure. Avg. treating press. 3100; Max. 3400#; AIR 41.5 BPM
Flushed w/1500 gals. wtr treated w/1% $CaCl_2$ & 20#/1000 gals WAC 8.
Log Tops: Pictured Cliffs 1953; Cliff House 3586; Point Lookout 4250;
Gallup 5592; Greenhorn 6328; Graneros 6378; Dakota 6502.

Witnessed by	Position	Company

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)

Open Hole Interval	Producing Formation(s)

RECEIVED
APR 6 1964
OIL CON. COM.
DIST. 3

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION	I hereby certify that the information given above is true and complete to the best of my knowledge.
Approved by: Original Signed Emery C. Arnold	Name: CRIGINAL SIGNED BY JOE C. SALMON Joe C. Salmon
Title: Supervisor Dist. # 3	Position: District Superintendent
Date: APR 6 1964	Company: Aztec Oil & Gas Company

NUMBER OF COPIES RECEIVED		5	
DISTRIBUTION			
SANTA FE		1	
FILE		1	4
U.S.G.S.		2	
LAND OFFICE			
TRANSPORTER	OIL		
	GAS		
PRORATION OFFICE			
OPERATOR		1	

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Form C-101
Revised (12/1/55)

NOTICE OF INTENTION TO DRILL

Notice must be given to the District Office of the Oil Conservation Commission and approval obtained before drilling or recompletion begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in QUINTUPLICATE. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission. If State Land submit 6 Copies Attach Form C-128 in triplicate to first 3 copies of form C-101

Farmington, New Mexico (Place) March 4, 1964 (Date)

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Gentlemen:

You are hereby notified that it is our intention to commence the Drilling of a well to be known as

Aztec Oil & Gas Company (Company or Operator)

McGRATH (Lease), Well No. A-1, in I (Unit). The well is

located 1720 feet from the South line and 990 feet from the

East line of Section 3, T. 29N, R. 12W, NMPM.

(GIVE LOCATION FROM SECTION LINE) Basin Dakota Pool, San Juan County

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

If State Land the Oil and Gas Lease is No.

If patented land the owner is E. M. McGrath

Address Wichita Falls, Texas

We propose to drill well with drilling equipment as follows: Rotary

The status of plugging bond is Covered by Blanket Bond

Drilling Contractor Moran Brothers

We intend to complete this well in the Dakota formation at an approximate depth of 6710

RECEIVED MAR 5 1964 OIL CON. COM. DIST. 3

CASING PROGRAM

We propose to use the following strings of Casing and to cement them as indicated:

Size of Hole	Size of Casing	Weight per Foot	New or Second Hand	Depth	Sacks Cement
12¼"	8 5/8"			300'	250 sx
7 7/8"	4 1/2"			6710'	800 sx

If changes in the above plans become advisable we will notify you immediately.

ADDITIONAL INFORMATION (If recompletion give full details of proposed plan of work.)

DV tool to be set at base of Mesaverde and cement to cover Pictured Cliffs
Perf & frac Dakota. Run 2 3/8" tubing
Proration Unit S 1/2 Section 3-T29N-R12W. 320 acres

Approved 3-6, 1964
Except as follows:

OIL CONSERVATION COMMISSION
By Emery C. Arnold

Sincerely yours,

Aztec Oil & Gas Company (Company or Operator)

By ORIGINAL SIGNED BY JOE C. SALMON Joe C. Salmon

Position District Superintendent

Send Communications regarding well to

Name Aztec Oil & Gas Company

Address Drawer 570, Farmington, New Mexico

FORM C-128
REVISED 8/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

SECTION A.

Date [redacted]

Operator Aztec Oil & Gas Company Lease McGrath Unit "A"

Well No. 1 Unit Letter I Section 3 Township 29 North Range 12 West NMPM

Located 1720 Feet From South Line, 990 Feet From East Line

County San Juan G. L. Elevation 5865 Dedicated Acreage [redacted] Acres

Name of Producing Formation Dakota Pool Basin Dakota

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes _____ No. X

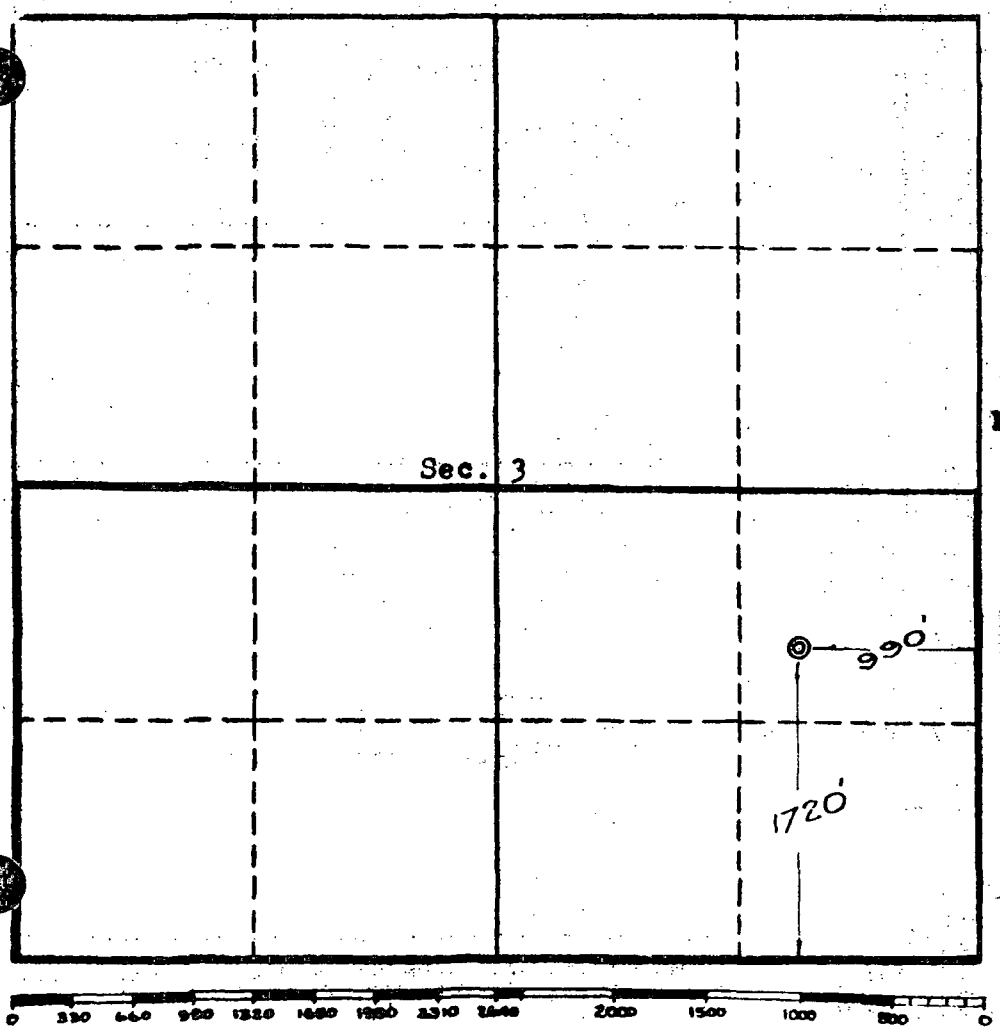
2. If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes _____ No _____. If answer is "Yes," Type of Consolidation _____

3. If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER		LAND DESCRIPTION
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	

RECEIVED
MAR 5 1964
OIL CON. COM.
DIST. 3

SECTION B.



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

[redacted]
(OPERATOR)

CRIGINAL SIGNED BY JOE C. SALMON
(REPRESENTATIVE)

[redacted]
(ADDRESS)

This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed Feb. 27, 1964

Four States Engineering Co.
FARMINGTON, NEW MEXICO

REGISTERED ENGINEER OR LAND SURVEYOR

Certificate No. 3602

API # 30-045-13092

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

APR 2006 RECEIVED OIL CONS. DIV. DIST. 3

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an Abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side.

5. Lease Serial No. SF-065557A ~~9000108~~
6. If Indian, Allottee or tribe Name
7. Unit or CA/Agreement, Name and/or No.
8. Well Name and No. Cornell C 1
9. API Well No. 30-045-13092
10. Field and Pool, or Exploratory Area: Basin Dakota
11. County or Parish, State: San Juan County, New Mexico

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
BP America Production Company Attn: Cherry Hlava

3a. Address: P.O. Box 3092 Houston, TX 77253

3b. Phone No. *(include area code)*: 281-366-4081

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
990' FNL & 990' FWL Sec 11 T29N R12W

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OR NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☒ Casing Repair	☐ New Construction	☐ Recomplete	☐ Abandon
	☐ Change Plans	☐ Plug and Abandon	☐ Water Disposal	
	☐ Injection	☐ Plug Back	☐ Other	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

BP America request permission to perform casing repair operations on the subject well as per the attached procedure.

Casing leak is suspected on above well. It is planned to do a pressure test on the casing and perform cement squeeze if necessary.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct

Name (Printed/typed): Cherry Hlava — Title: Regulatory Analyst

Signature: Cherry Hlava — Date: 03/29/2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by: Matt Halbert — Title: Pet Eng — Date: 4/4/06

Conditions of approval, if any, are attached. Approval of this notice does not warrant or Certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office: BLM-FFO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter witin its jurisdiction.

NMOCD

SJ Basin Well Work Procedure

Well Name: Cornell C 1
Version: 1.0
Date: March 28, 2006
Budget: GCU Well Servicing
Repair Type: Casing Repair
SAP Number:

Objective: Casing Repair.

1. Pull out completion.
2. Pressure test casing. If there is a leak, conduct a cement squeeze.
3. RIH completion.
4. Return to production.

Pertinent Information: Gas BTU content for this well is 1247; Sp gr. is 0.7322; H2S is 0 (05/26/05). Venting and Flaring document needs to be followed with the assumption that BTU content is above 950. BH test result: 0.5 psi initially then down to nothing in 14 second (05/16/03).

Location:	T29N-R12W-Sec11	API #:	30-045-13092
County:	San Juan	FlacWell:	97907201
State:	New Mexico	Meter #:	73241
Horizon:	DK	Engr:	Sanggam Situmeang ph (505) 326-9263 fax (505) 326-9251

Economic Information:
WI: 55.0%
NRI: 40.5%
Cost: $85,000 gross
Uplift: 100 mcfd

Normal Operating Procedures:

NOP-7803-01	At Risk Well Locations
NOP-7805	Lock Out Tag Out GCU
NOP-7812-01	Underbalanced Well Control Tripping
NOP-7814-02	Flowback Operations

Dispensations:

- Section 9.4.1 (Issue #5, May 2003) – Document #K5500000267
  Stripping rubber to be used instead of Hydril / Annual Preventer.
- Section 24.2 (Issue #5, May 2003) – Document #K5500000261
  No dual mechanical barriers in annulus during all well servicing

Procedure:

Preparations

1. Perform pre-rig site inspection. Check for size of location, gas taps, other wells, other operators, running equipment, wetlands, wash (dikes required), H2S, barriers needed for equipment, landowner issues, location of pits (buried lines in pits), raptor nesting, critical location.

2. Check anchors. Check ID wellhead, if earth pit is required have One Call made 48 hours prior to digging.

3. Have P&S strip location and set barriers as necessary. Lock out/tag out any remaining production equipment.

Rig Operations

4. MIRU workover rig. Hold safety meeting and perform JSA. Complete necessary paperwork and risk assessment.

5. Check and record tubing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings. Check hold down pins on hanger.

6. Blow down well to flow back tank. Kill with 2% KCl water ONLY if necessary. Check all casing strings to ensure no pressure exist on any annulus.

7. RU slickline. Set mechanical barrier plugs in tubing. Blowdown / kill tubing and casing.

8. Hold JHA and fill out permit for BOP critical lift. Test single mechanical barrier on annulus side, if wellhead has raised neck hanger and bonnet test connection. ND wellhead. Install TIW valve on lifting pup in hanger. Strip on and NU BOP. Test BOP.

9. Strip on and NU diversion spool, stripper head and other under balanced well control equipment.

10. Unlock the Lockset Packer at 6200'. PU and TIH tubing until tag fill. Tally out of hole, calculate depth of tag and/or hole, check tubing for wear or scale.

11. TIH w/ bit & scraper to top of perforations and clean out to PBTD at 6570' if necessary. LD tubing if needed replacement.

12. TIH w/ RBP & Packer. Set RBP at 6250'. TOH one joint and set packer. Pressure test RBP to 1500 psi.

13. Pressure test casing above packer. Isolate leak, if any, by moving packer up hole and repeating pressure test of packer.
    Note: Please notify engineer immediately if there is a leak. BLM will be also notified.

14. Establish injection rate into leak and attempt to circulate to surface.

15. Release packer, spot sand on RBP and Set packer 50' above leak.

16. RU Cementer and squeeze leak as per Cementer procedure. Circulate to surface if possible. WOC.

17. Unset packer and TOH. Pressure test squeeze to 500 psi. Clean out to top of RBP. Latch RBP and TOH.

18. MU BHA with F and X profile nipples. TIH tubing to 6406'. MU redressed tubing hanger and TIW valve on lifting pup. Land tubing.

19. Hold JHA and fill out permit for BOP critical lift. ND and strip off diversion spool, stripper head and other under balanced well control equipment. ND and strip off BOP. Remove TIW valve and lifting sub. NU wellhead.

Put well back on production

20. RDMO workover rig.

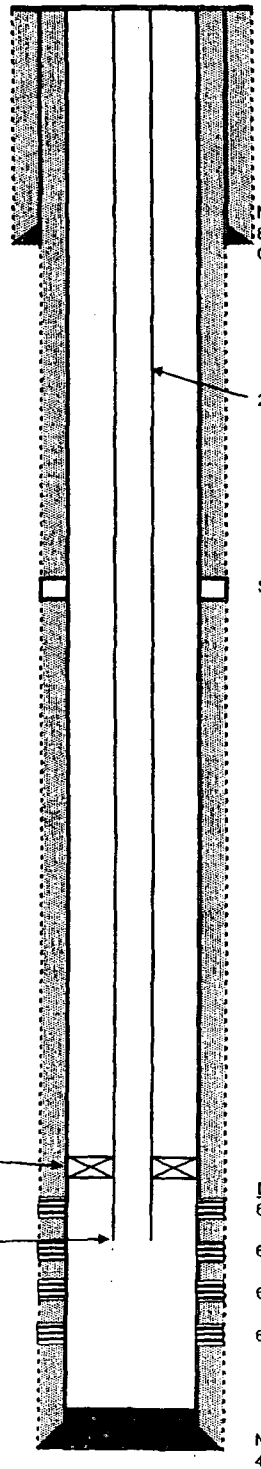
21. Follow log out/tag out procedures to power up, pressure up, purge and return to service all surface equipment.

22. Return well to production.

bp

Cornell C 1
Dakota
API # 30-045-13092
T-29N, R-12-W, Sec. 11
San Juan County, New Mexico

G.L. 5716'
K.B. N/A



N/A" Hole
8 5/8", 24.0#, J-55 @ 250'
Cmt w/ 150 sxs

2 1/16" Tubing

Stage tool @ 2017'

Lockset Packer @ 6200'
(09/1983)

End of Production String @ 6375'
(09/1983)

Dakota Perforations
6298' - 6306', 4 SPF
6380' - 6404', 4 SPF
6462' - 6466', 4 SPF
6477' - 6483', 4 SPF
Frac w/ 140,800 gals water, 200,000# 20/40 sand

N/A" Hole
4 1/2", 11.6# & 9.5#, J-55 @ 6604'
Stage 1: 250 sxs cmt
Stage 2: 50 sxs cmt

PBTD: 6570'
TD: 6604'

Form 9-330

Form approved.
Budget Bureau No. 42-R355.4

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF 063327-A
LEASE OR PERMIT TO PROSPECT

RECEIVED JAN 29 1962 OIL CON. C DIST.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED JAN 30 1962

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Tenneco Corp., acting by & thru its managing agent, Tenneco Oil Company Address P. O. Box 171, Durango, Colorado

Lessor or Tract Cornell Dakota Gas Unit "C" Field Basin Dakota State New Mexico

Well No. 1 Sec. 11 T. 29N R. 12W Meridian N.M.P.M. County San Juan

Location 990 ft. N. of N. Line and 990 ft. E. of W. Line of Section 11 Elevation 5716 GL (Check line relative to sec. line)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed L. B. Flush

Date January 23, 1962 Title Dist. Production Supt.

The summary on this page is for the condition of the well at above date.

Commenced drilling December 6, 1961 Finished drilling December 27, 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6290 to 6640 No. 4, from 6170 to 6185 G

No. 2, from 4550 to 5435 G No. 5, from to

No. 3, from 3400 to 4560 G No. 6, from to

IMPORTANT WATER SANDS

No. 1, from None to No. 3, from to

No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From	Perforated To	Purpose
8-5/8	24#	8	[illegible]	250'	Baker Guide Shoe				Surface
4-1/2	9.5#	8-RT	[illegible]	6640'	Baker Guide Shoe		6290	6640	Production

HYDROFRAC OIL OIL OR GAS WELL

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	250'	150	Two Plug		
4-1/2	6640	300	Two Plug		

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set

Adapters—Material Size

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 252 feet to 6640 feet, and from feet to feet

Cable tools were used from 0 feet to 252 feet, and from feet to feet

DATES

Potential Test: F/1978 MCFPD on 3/4" ch.

January 23, 1962 Put to producing January 20, 1962

The production for the first 24 hours was barrels of fluid of which % was oil; % emulsion; % water; and % sediment. Gravity, °Bé.

If gas well, cu. ft. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas

Rock pressure, lbs. per sq. in.

EMPLOYEES

, Driller , Driller

, Driller , Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
12	2000	1988	Sand and shale
2000	3400	1400	Shale w/some siltstone
3400	4550	1150	Sandstone w/some shale
4550	5435	885	Shale
5435	6185	750	Shale w/sand stringers
6185	6290	105	Siltstone and shale
6290	T.D.	350	Sandstone and shale

Electric Log Tops

Kirtland	600
Farmington-Fruitland	785
Pictured Cliff	1810
Lewis Shale	1970
Mesaverde	3400
Mancos	4560
Gallup	5435
Greenhorn	6185
Dakota	6295
T.D.	6640

FROM—	TO—	TOTAL FEET	FORMATION

(OVER)

FORMATION RECORD—Continued

16—43024-4

FOLD | MARK

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD—Continued

API # 30-045-08945

Form 9-330

RECEIVED MAR 11 1963 OIL CONSERVATION COM. DIST. 3

Form approved.
Budget Bureau No. 42-R355.4.

U. S. LAND OFFICE SANTA FE
SERIAL NUMBER 077922
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company AZTEC OIL AND GAS COMPANY Address P. O. DRAWER 570-FARMINGTON, N. MEX.
Lessor or Tract McGRATH Field BASIN DAKOTA State NEW MEXICO
Well No. C-1 Sec. 34 T. 30N R. 12W Meridian N.M.P.M. County SAN JUAN
Location 870 ft. [N.] of S. Line and 1190 ft. [W.] of E. Line of SECTION 34 Elevation 5774 g.l.

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed JOE C. SALMON
Title DISTRICT SUPERINTENDENT

Date MARCH 7, 1963

The summary on this page is for the condition of the well at above date.

Commenced drilling FEBRUARY 7, 1963 Finished drilling FEBRUARY 18, 1963

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from 6387 to 6400 G
No. 2, from 6462 to 6484 G
No. 3, from 6542 to 6576 G
No. 4, from to
No. 5, from to
No. 6, from to

IMPORTANT WATER SANDS

No. 1, from to
No. 2, from to
No. 3, from to
No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8 5/8	24	8 rd.	J-55	322					
4 1/2	9.5	8 rd.	J-55	3468					
2 3/8	4.7	8 rd.	J-55	6399					
4 1/2	11.6	8 rd.	J-55	1183					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	323	225	Displacement		
4 1/2	6637	925	Two Plug		
2 3/8	6408	—	—		

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set
Adapters—Material Size

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

Fraced w/76,950 gals water & 72,000# sand, Breakdown pr.-1400#, Avg. Trtg. Pr.-2750#, Max. Trtg. Pr.-3000#, A.I.R.-30.6 bpm, Flushed w/150 bbls, dropped 65 balls, I.S.I.-1500#, 10 min S.I.-1150#, Shut in for 1 hr., Perforated single- 6374'.

TOOLS USED

Rotary tools were used from 0 feet to 6637 feet, and from 0 feet to 6605 feet
Cable tools were used from feet to feet, and from feet to feet

DATES

FEBRUARY 21, 1963 Put to producing, 19

The production for the first 24 hours was barrels of fluid of which % was oil; % emulsion; % water; and % sediment. Gravity, °Bé.

If gas well, cu. ft. per 24 hours AOF-1,577 Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in. 1657

EMPLOYEES

, Driller , Driller
, Driller , Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION		
0	325	325	Surface	LOG TOPS	
325	604	279	Sand & Shale	Pictured Cliffs	1666
604	1470	866	Sand & Shale	Cliff House	3470
1470	2015	545	Sand & Shale	Point Lookout	3185
2015	2665	650	Sand & Shale	Gallup	5532
2665	2970	305	Sand & Shale	Greenhorn	6281
2970	3160	190	Sand & Shale	Graneros	6333
3160	3369	209	Sand & Shale	Dakota	6460
3369	3595	226	Sand & Shale		
3595	3820	225	Shale		
3820	3990	170	Sand & Shale		
3990	4330	340	Sand & Shale		
4330	4515	185	Sand & Shale		
4515	4690	175	Sand & Shale		
4690	4935	245	Sand & Shale		
4935	5081	146	Sand & Shale		
5081	5350	269	Sand & Shale		
5350	5471	121	Sand & Shale		
5471	5670	199	Sand & Shale		
5670	5778	108	Sand & Shale		
5778	5922	144	Sand & Shale		
5922	6040	118	Sand & Shale		
6040	6125	85	Sand & Shale		
6125	6291	166	Sand & Shale		
6291	6351	60	Sand & Shale		

(over)

16—43974-6

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
6291	6351	60	Sand & Shale
6351	6401	50	Sand & Shale
6401	6461	60	Sand & Shale
6461	6484	23	Sand
6484	6567	83	Sand & Shale
6567	6588	21	Sand
6588	6637	49	Sand
6637			Total Depth

10—43094 2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Form 9-331 a
(Feb. 1951)

			O

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Form Approved.

Land Office SANTA FE

Lease No. 077922

Unit

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	XX
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

FEBRUARY 20, 19 63

Well No. McGRATH C-1 is located 870 ft. from XXXX {S} line and 1190 ft. from {E} XXXX line of sec. 34

SE¼, SECTION 34 (¼ Sec. and Sec. No.) T-30-N (Twp.) R-12-W (Range) N.M.P.M. (Meridian)

BASIN DAKOTA (Field) SAN JUAN (County or Subdivision) NEW MEXICO (State or Territory)

The elevation of the derrick floor above sea level is 3774 ft. g.l.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

T.D. - 6637 P.B.T.D. - 6605

Ran logs: Pictured Cliffs - 1886, Cliff House - 3470, Point Lookout - 4185, Gallup - 5532, Greenhorn - 6261, Graneros - 6333 and Dakota - 6460.
Perforated with 4 shots per foot - 6387-6400, 6462-6484 and 6542-6576
Ran 205 jts., 6625 feet of 4 1/2" casing, landed at 6637.
Cemented with 925 sacks.
Tested casing with 500# pressure for two hours.
Pipe - O.K.

RECEIVED
FEB 25 1963
OIL CON. COM.
DIST. 3

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company AZTEC OIL AND GAS COMPANY

Address P. O. DRAWER 570

FARMINGTON, NEW MEXICO

By JOE C. SALMON

Title DISTRICT SUPERINTENDENT

GPO 914974

API # 30-045-08946

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease: State [ ] Fee [X]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [ ] GAS WELL [X] OTHER-

7. Unit Agreement Name

2. Name of Operator: Mobil Oil Corporation

8. Farm or Lease Name: Carnahan Vait

3. Address of Operator: Box 633, Midland, Texas 79701

9. Well No.: 1

4. Location of Well: UNIT LETTER P, 990 FEET FROM THE South LINE AND 990 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 30-N RANGE 12-W NMPM.

10. Field and Pool, or Wildcat: Basin Dakota

15. Elevation (*Show whether DF, RT, GR, etc.*): 5911 Gr

12. County: San Juan

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[X]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]			COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]	CHANGE PLANS	[ ]	CASING TEST AND CEMENT JOB	[ ]		
OTHER	[ ]			OTHER	[ ]		

17. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

Plug & Abandon as Per attached Procedure

RECEIVED
MAY 17 1971
OIL CON. COM.
DIST. 3

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED: [signature] TITLE: Authorized Agent DATE: 5-14-71

APPROVED BY: [signature] TITLE: Sup Dist III DATE: 5-17-71

CONDITIONS OF APPROVAL, IF ANY:

Notify NMOCC office
24 hours in advance
of starting work.

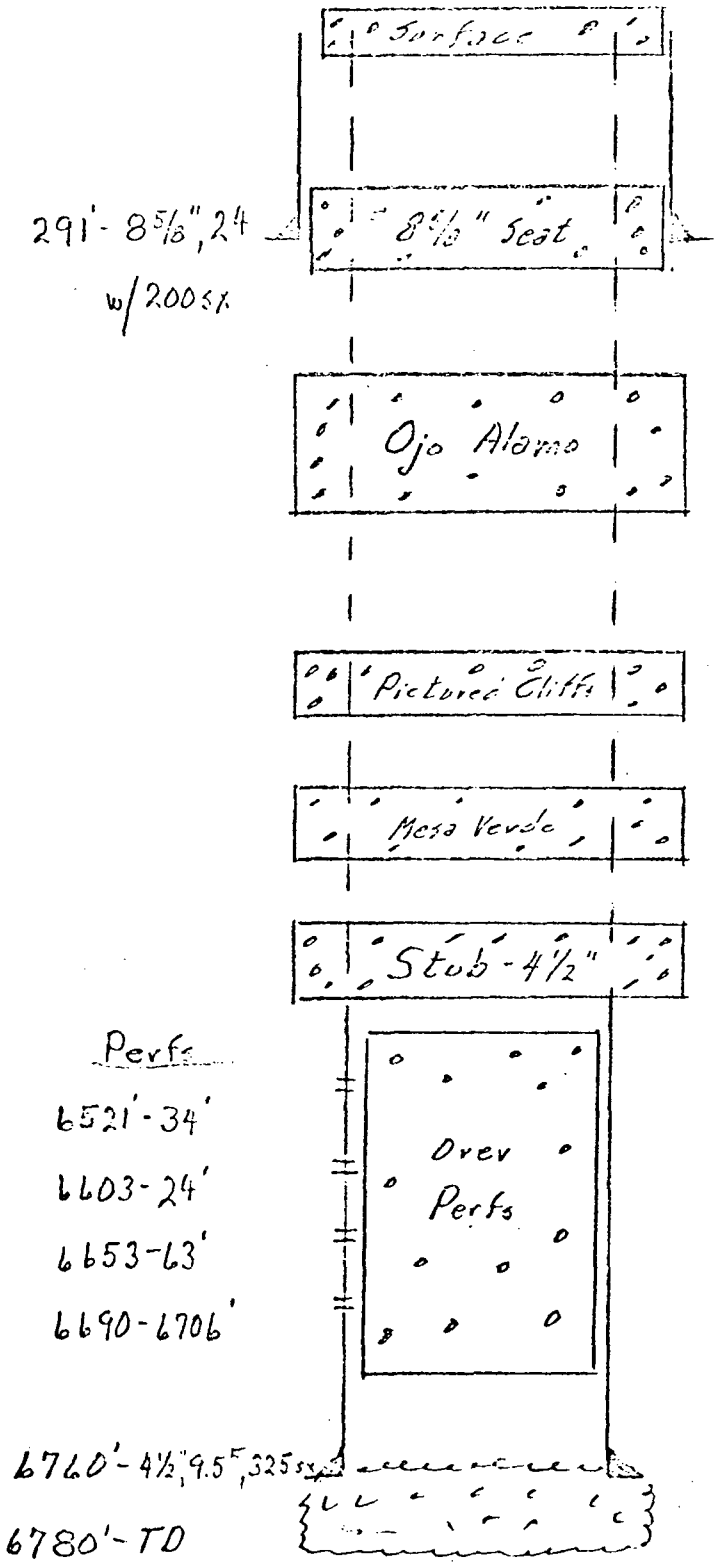
Procedure, P&A
Carnahan No. 1
Basin Dakota (Gas)

1. Circulate hole to mud laden fluid.
2. Place cement plug — across perfs (6706' — 6521') and up to 6400' approximately. (30 sx)
3. Determine free point and cut 4½", 9.5# casing and pull. Estimated lowest free point is 4,000'.
4. Place cement plugs as follows:
   a. Across 4½" stub, 50' above and 50' below (25 sx)
   b. Mesa Verde (if 4½" pulls) - 3800' up to 3600' (interval plus 50') (75 sx)
   c. Pictured Cliffs - 2160' up to 2000' (interval plus 50') (50 sx)
   d. Ojo Alamo - 800' up to 420' (140 sx) (this will also cover Tertiary Sd)
   e. 8⅝" casing seat - 370' up to 240' (50 sx)
   f. Surface plug - (10 sx)
5. Erect pipe monument & clear location

JCG/4-3-71

Carnahan Unit #1
Basin Dakota Pool
Unit P, Sect 35, 30N, 12W
San Juan Co., New Mexico

G.L. 5911'



P & A

1. Plug over perfs & 100' to 6400'
2. Cut and pull free 4 1/2" pipe
3. Plugs across —
   a. 4 1/2" stub
   b. Mesa Verde
   c. Picture Cliffs
   d. Ojo Alamo
   e. 8 5/8" casing seat
   f. surface
4. Monument

JCG/4-2-71

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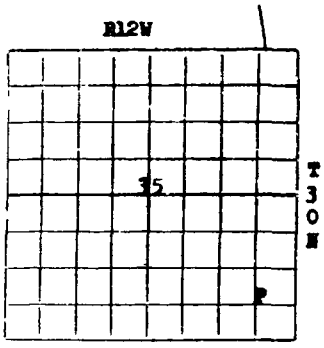
(Form C-105)

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD



AREA 640 ACRES
LOCATE WELL CORRECTLY

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copies

Texas Eastern Transmission Corporation (Company or Operator) Carnahan Unit (Lease)

Well No. 1, in NE ¼ of SE ¼, of Sec. 35, T. 30N, R. 12W, NMPM.

Dakota San Juan County.

Well is 990 feet from South line and 990 feet from East line of Section 35. If State Land the Oil and Gas Lease No. is -

Drilling Commenced December 19, 1960 Drilling was Completed January 15, 1961

Name of Drilling Contractor Exeter Drilling Company

Address 919 Midland Savings Bldg, Denver 2, Colorado

Elevation above sea level at Top of Tubing Head 5,911.4 The information given is to be kept confidential until March 1, 1961

Gas SANDS OR ZONES

Dakota

No. 1, from 6,521 to 6,534 No. 4, from 6,690 to 6,706

No. 2, from 6,603 to 6,624 No. 5, from ... to ...

No. 3, from 6,653 to 6,663 No. 6, from ... to ...

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from None to ... feet.

No. 2, from ... to ... feet.

No. 3, from ... to ... feet.

No. 4, from ... to ... feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8"	24#	New	291.55	-	-	-	Surface set @ 301'
4 1/2"	9.5&11.6#	New	6,760.74	Halliburton	-	6521-34	Production
						6603-24	
						6653-63	
						6690-6703	

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12"	8 5/8	301	200	Displacement	Native	-
7 7/8"	4 1/2	6,760	250 sx. Pozmix	Displacement	9.4#/gal.	107 bbls.
			8, 50-50, 4%			
			gel + 75sx.	Latex		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Fractured: Using Halliburton "Slick Gel Water Frac" 6690-6703 and 6653-63 w/40,000# 20-40 sand and 48,614 bbls. water

6603-6624 with 40,000# 20-40 sand and 40,177 bbls. water

6521-6534 with 30,000# 20-40 sand and 31,983 bbls. water

Result of Production Stimulation

Absolute Potential = 3,226 MCF/day

Depth Cleaned Out

RECEIVED
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DIST

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 301 feet to 6,778 feet, and from ..... feet to ..... feet.
Cable tools were used from Surface feet to 301 feet, and from ..... feet to ..... feet.

PRODUCTION

Put to Producing (Shut in awaiting connection) 19.....

OIL WELL: The production during the first 24 hours was - barrels of liquid of which - % was was oil; - % was emulsion; - % water; and - % was sediment. A.P.I. Gravity -

GAS WELL: The production during the first 24 hours was A.P.=3,226 M.C.F. plus unknown barrels of liquid Hydrocarbon. Shut in Pressure 1852 lbs.

Length of Time Shut in 8 days

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Devonian	T. Ojo Alamo	Surface
T. Salt	T. Silurian	T. Kirtland-Fruitland	803
B. Salt	T. Montoya	T. Farmington	1,000
T. Yates	T. Simpson	T. Pictured Cliffs	2,050
T. 7 Rivers	T. McKee	T. Menefee	3,800
T. Queen	T. Ellenburger	T. Point Lookout	4,405
T. Grayburg	T. Gr. Wash	T. Mancos	4,715
T. San Andres	T. Granite	T. Dakota	6,519
T. Glorieta	T.	T. Morrison	
T. Drinkard	T.	T. Penn	
T. Tubbs	T.	T.	
T. Abo	T.	T.	
T. Penn	T.	T.	
T. Miss	T.	T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
Surface	800	800	Sandstone w/shale int. beds.				
800	1,739	939	Shale w/minor sand beds				
1,739	2,000	261	Shale, siltstone & coal				
2,000	2,130	130	Sandstone				
2,130	3,660	1,530	Shale				
3,660	4,715	1,055	Sandstone and Shale				
4,715	5,680	965	Shale				
5,680	6,050	370	Siltstone and Silty Shale				
6,050	6,210	160	Limey Siltstone & shale				
6,210	6,413	203	Shale				
6,413	6,475	62	Shaley Limestone				
6,475	6,520	45	Shale				
6,520	6,778	258	Sandstone w/int. beds carbonaceous shale				
T.D.	6,778						

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

J. D. Gedan March 1, 1961 (Date)

Company or Operator Texas Eastern Trans. Corp. Address P. O. Box 1189, Houston 1, Texas

Name J. D. Gedan Position or Title Chief Production Clerk

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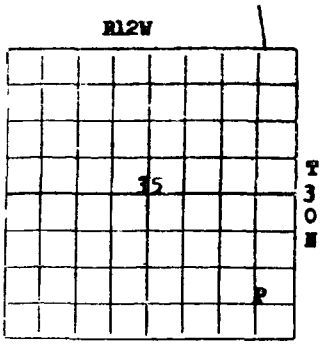
TRANSPORTER	OIL	
	GAS	
PRORATION OFFICE		
OPERATOR		

Revised 7/1/52
(Form C-105)

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico



AREA 640 ACRES
LOCATE WELL CORRECTLY

WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copies

Texas Eastern Transmission Corporation (Company or Operator) Carnahan Unit (Lease)

Well No. 1, in SE ¼ of SE ¼, of Sec. 35, T. 30N, R. 12W, NMPM.

Dakota San Juan County.

Well is 990 feet from South line and 990 feet from East line

of Section 35. If State Land the Oil and Gas Lease No. is -

Drilling Commenced December 19, 1960 Drilling was Completed January 15, 1961

Name of Drilling Contractor Exeter Drilling Company

Address 919 Midland Savings Bldg, Denver 2, Colorado

Elevation above sea level at Top of Tubing Head 5,911.4 The information given is to be kept confidential until March 1, 1961

Gas SANDS OR ZONES

Dakota

No. 1, from 6,521 to 6,534 No. 4, from 6,690 to 6,706

No. 2, from 6,603 to 6,624 No. 5, from to

No. 3, from 6,653 to 6,663 No. 6, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from None to feet.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8"	24#	New	291.55	-	-	-	Surface set @ 301'
4 1/2"	9.5&11.6#	New	6,760.74	Halliburton	-	6521-34	Production
						6603-24	
						6653-63	
						6690-6703	

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12"	8 5/8	301	200	Displacement	Native	-
7 7/8"	4 1/2	6,760	250 sx. Pozmix	Displacement	9.4#/gal.	107 bbls.
			B, 50-50, 4%			
			gel + 75sx.	Latex		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Fractured: Using Halliburton "Slick Gel Water Frac" 6690-6703 and 6653-63 w/40,000# 20-40 sand and 48,614 bbls. water

6603-6624 with 40,000# 20-40 sand and 40,177 bbls. water

6521-6534 with 30,000# 20-40 sand and 31,983 bbls. water

Result of Production Stimulation

Absolute Potential = 3,226 MCF/day

RECEIVED
MAR 7 1961
OIL CON. COM.
DIST.

Depth Cleaned Out

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 301 feet to 6,778 feet, and from ..... feet to ..... feet.

Cable tools were used from Surface feet to 301 feet, and from ..... feet to ..... feet.

PRODUCTION

Put to Producing (Shut in awaiting connection), 19.....

OIL WELL: The production during the first 24 hours was - barrels of liquid of which - % was was oil; - % was emulsion; - % water; and - % was sediment. A.P.I. Gravity -

GAS WELL: The production during the first 24 hours was A.P.=3,226 M.C.F. plus unknown barrels of liquid Hydrocarbon. Shut in Pressure 1852 lbs.

Length of Time Shut in 8 days

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Devonian	T. Ojo Alamo	Surface
T. Salt	T. Silurian	T. Kirtland-Fruitland	803
B. Salt	T. Montoya	T. Farmington	1,000
T. Yates	T. Simpson	T. Pictured Cliffs	2,050
T. 7 Rivers	T. McKee	T. Menefee	3,800
T. Queen	T. Ellenburger	T. Point Lookout	4,405
T. Grayburg	T. Gr. Wash	T. Mancos	4,715
T. San Andres	T. Granite	T. Dakota	6,519
T. Glorieta	T.	T. Morrison	
T. Drinkard	T.	T. Penn	
T. Tubbs	T.	T.	
T. Abo	T.	T.	
T. Penn	T.	T.	
T. Miss	T.	T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
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800	1,739	939	Shale w/minor sand beds				
1,739	2,000	261	Shale, siltstone & coal				
2,000	2,130	130	Sandstone				
2,130	3,660	1,530	Shale				
3,660	4,715	1,055	Sandstone and Shale				
4,715	5,680	965	Shale				
5,680	6,050	370	Siltstone and Silty Shale				
6,050	6,210	160	Limey Siltstone & shale				
6,210	6,413	203	Shale				
6,413	6,475	62	Shaley Limestone				
6,475	6,520	45	Shale				
6,520	6,778	258	Sandstone w/int. beds carbonaceous shale				
T.D.	6,778						

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

J. D. Gadan March 1, 1961 (Date)

Company or Operator Texas Eastern Trans. Corp. Address P. O. Box 1189, Houston 1, Texas

Name J. D. Gadan Position or Title Chief Production Clerk

30-045-08946

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Form C-101
Revised (12/1/55)

NOTICE OF INTENTION TO DRILL

Notice must be given to the District Office of the Oil Conservation Commission and approval obtained before drilling or recompletion begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in QUINTUPLICATE. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission. If State Land submit 6 Copies Attach Form C-128 in triplicate to first 3 copies of form C-101

Houston, Texas (Place) December 19, 1960 (Date)

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Gentlemen:

You are hereby notified that it is our intention to commence the Drilling of a well to be known as

Texas Eastern Transmission Corporation, et al (Company or Operator)

Carnahan Unit (Lease), Well No. 1, in P (Unit). The well is located 990 feet from the South line and 990 feet from the East line of Section 35, T 30N, R 12, NMPM.

(GIVE LOCATION FROM SECTION LINE) Dakota Pool, San Juan County

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

If State Land the Oil and Gas Lease is No.

If patented land the owner is David A. Carnahan

Address 2907 San Juan Dr. Fullerton, California

We propose to drill well with drilling equipment as follows:

Rotary Tools to Total Depth

The status of plugging bond is issued by American General Insurance Company

Drilling Contractor Exeter Drilling Company
919 Midland Saving Bldg.
Denver 2, Colorado

We intend to complete this well in the Dakota Formation formation at an approximate depth of 6800', or base of Dakota feet.

RECEIVED
DEC 21 1960
OIL CON. COM.
DIST. 3

CASING PROGRAM

We propose to use the following strings of Casing and to cement them as indicated:

Size of Hole	Size of Casing	Weight per Foot	New or Second Hand	Depth	Sacks Cement
12	8 5/8	24#	New	300	150 sx.
7 7/8	4 1/2	11.6 & 9.5#	New	6800	250 sx. + 4% gel (Pozmix 8, 50-50)

If changes in the above plans become advisable we will notify you immediately.

ADDITIONAL INFORMATION (If recompletion give full details of proposed plan of work.)

320 acre Gas Unit formed E/2 of Section 35.
Will set stage cementing tool to protect Pictured Cliffs and Fruitland Formations with cement.

Approved 12-21, 1960
Except as follows:

OIL CONSERVATION COMMISSION
By Eugene C. Chenoweth

Sincerely yours,
Texas Eastern Transmission Corporation (Company or Operator)
By J. D. Gaden
Position Chief Production Clerk
Send Communications regarding well to
Name Texas Eastern Transmission Corporation
Address P. O. Box 1189, Houston 1, Texas

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FORM C-128
Revised 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator	Lease	Well No.
TEXAS EASTERN TRANSMISSION CORPORATION	TETCO ET AL No. 1 CARNAHAN UNIT	1

Unit Letter	Section	Township	Range	County
P	35	30 NORTH	12 WEST	SAN JUAN

Actual Footage Location of Well: 990 feet from the SOUTH line and 990 feet from the EAST line

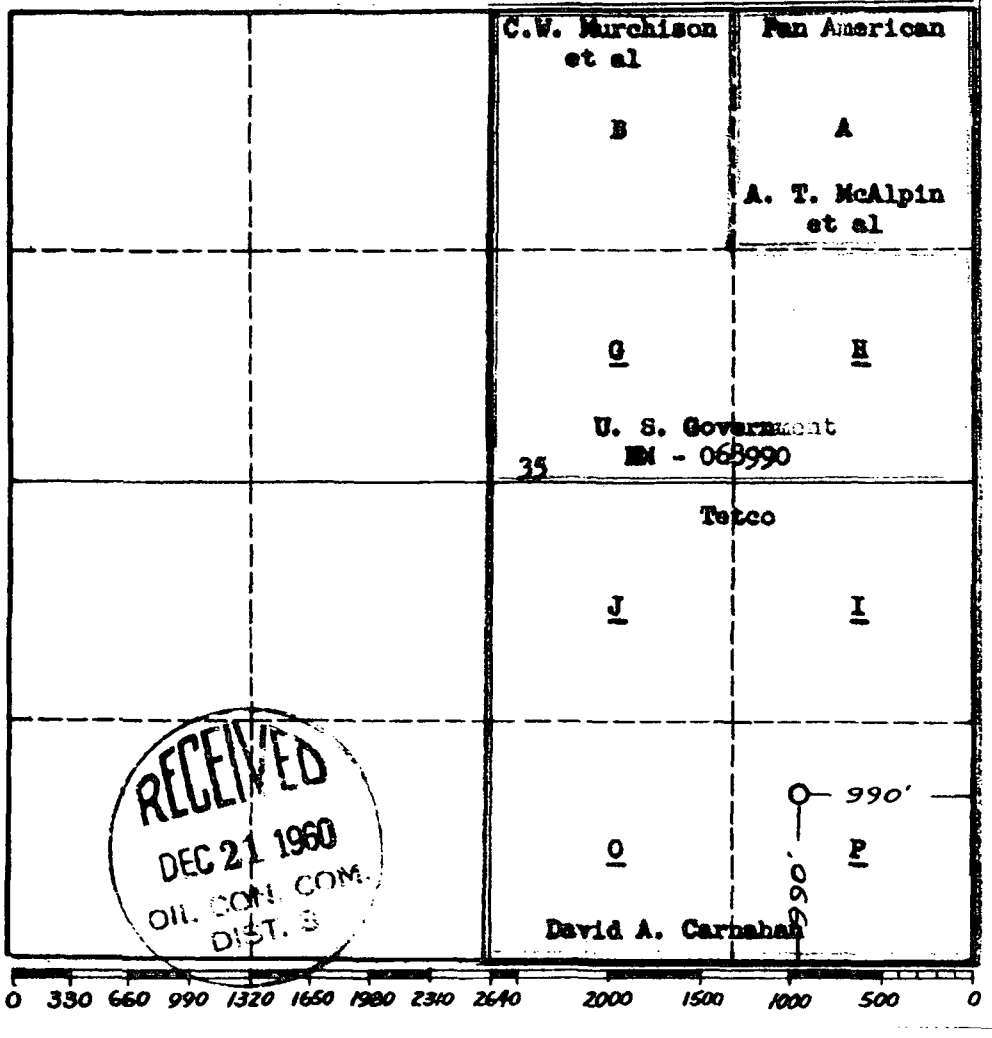
Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5910.0	DAKOTA		320 Acres

Ref: GLO plat dated 7 April 1881

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO X . *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES X NO _____ . If answer is "yes," Type of Consolidation Communitization Agreement (Pending)
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description
PAN AMERICAN	SECTION 35, UNIT A
C. W. MURCHISON, ET AL	SECTION 35, UNIT B, G, AND H.

SECTION B



CERTIFICATION

I hereby certify that the information in *SECTION A* above is true and complete to the best of my knowledge and belief.

J. D. Gaden

Name: J. D. Gaden

Position: Chief Production Clerk

Company: Texas Eastern Trans. Corp.

Date: December 19, 1960

I hereby certify that the well location shown on the plat in *SECTION B* was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 8 December 1960

Registered Professional Engineer and/or Land Surveyor

James P. Leese

James P. Leese

Certificate No. 1463

INSTRUCTIONS FOR COMPLETION OF FORM C-128

1. Operator shall furnish and certify to the information called for in Section A.

2. Operator shall outline the dedicated acreage for *both* oil and gas wells on the plat in Section B.

3. A registered professional engineer or land surveyor registered in the State of New Mexico or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.

4. All distances shown on the plat must be from the outer boundaries of the Section.

5. If additional space is needed for listing owners and their respective interests as required in question 3 of Section A, please use space below.

NUMBER OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER OIL / GAS		
PRORATION OFFICE		
OPERATOR		

FORM C-128
Revised 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator	Lease	Well No.
TEXAS EASTERN TRANSMISSION CORPORATION	TETCO ET AL No. 1 CARNAHAN UNIT	1

Unit Letter	Section	Township	Range	County
P	35	30 NORTH	12 WEST	SAN JUAN

Actual Footage Location of Well: 990 feet from the SOUTH line and 990 feet from the EAST line

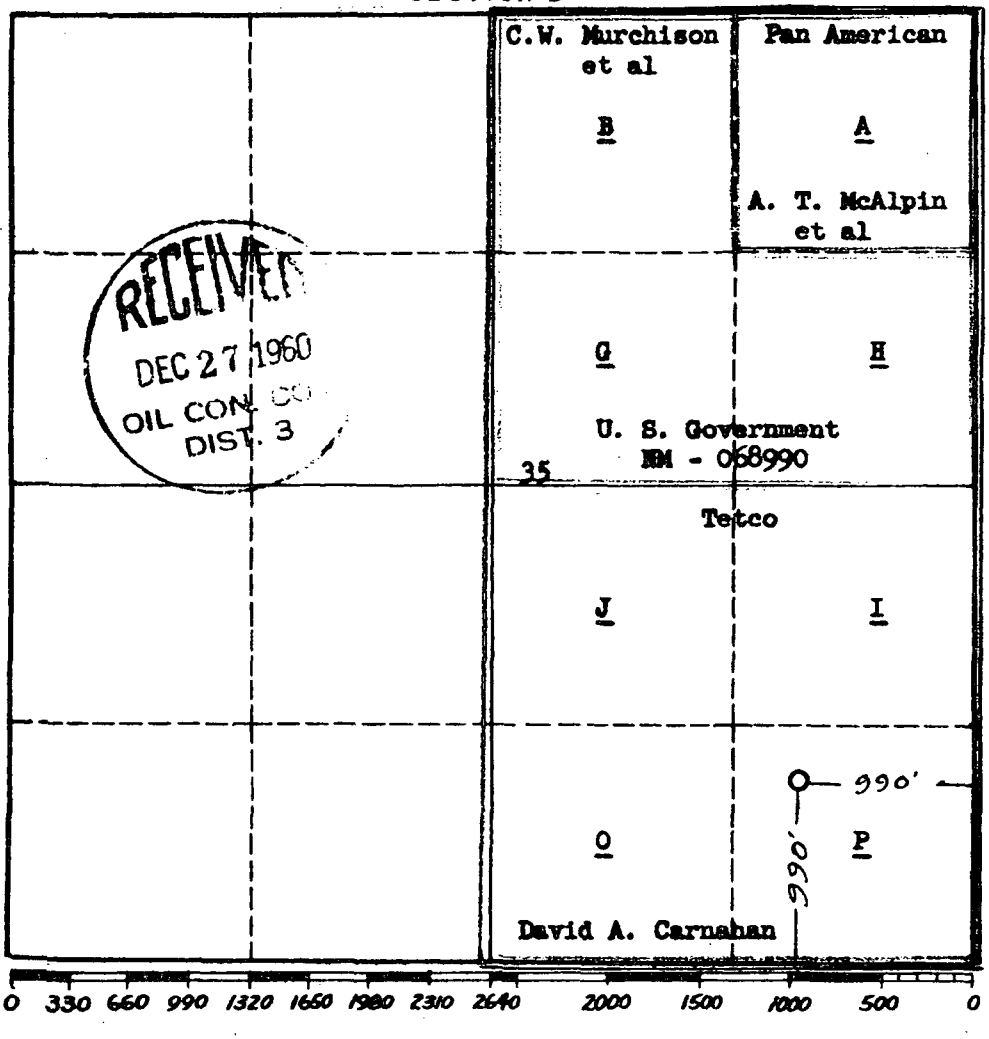
Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5910.0	DAKOTA		320 Acres

Ref: GLO plat dated 7 April 1881

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO X . *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES X NO _____ . If answer is "yes," Type of Consolidation Communitization Agreement (Pending)
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description
PAN AMERICAN	SECTION 35, UNIT A
C. W. MURCHISON, ET AL	SECTION 35, UNIT B, G, AND H.

SECTION B



RECEIVED
DEC 27 1960
OIL CON. COM.
DIST. 3

CERTIFICATION

I hereby certify that the information in *SECTION A* above is true and complete to the best of my knowledge and belief.

J. D. Gaden

Name: J. D. Gaden

Position: Chief Production Clerk

Company: Texas Eastern Trans. Corp.

Date: December 19, 1960

I hereby certify that the well location shown on the plat in *SECTION B* was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 8 December 1960

Registered Professional Engineer and/or Land Surveyor

James P. Lease

James P. Lease

Certificate No. 1463

INSTRUCTIONS FOR COMPLETION OF FORM C-128

1. Operator shall furnish and certify to the information called for in Section A.

2. Operator shall outline the dedicated acreage for *both* oil and gas wells on the plat in Section B.

3. A registered professional engineer or land surveyor registered in the State of New Mexico or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.

4. All distances shown on the plat must be from the outer boundaries of the Section.

5. If additional space is needed for listing owners and their respective interests as required in question 3 of Section A, please use space below.

API # 30-045-11770

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. **Location of Well, Footage, Sec., T, R, M**
1750'FNL, 990'FWL, Sec.35, T-30-N, R-12-W, NMPM

5. **Lease Number**
SF-077922

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

8. **Well Name & Number**
Hudson J #3

9. **API Well No.**
30-045-11770

10. **Field and Pool**
Basin Fruitland Coal/
Basin Dakota

11. **County and State**
San Juan Co, NM

FEB 2001

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission		**Type of Action**			
___	Notice of Intent	___	Abandonment	___	Change of Plans
		_X_	Recompletion	___	New Construction
_X_	Subsequent Report	___	Plugging Back	___	Non-Routine Fracturing
		___	Casing Repair	___	Water Shut off
___	Final Abandonment	___	Altering Casing	___	Conversion to Injection
		_X_	Other - TA Daktoa		

13. **Describe Proposed or Completed Operations**

1-11-01 MIRU. ND WH. NU BOP. TOOH w/1 ½" tbg. TIH w/bit to 6500'. SDON.
1-12-01 TOOH w/bit. TIH w/CIBP, set @ 6400'. PT CIBP & csg to 500 psi/15 min, OK. Ran CBL @ 2250-1550'. TOC @ 1170'. Perf FTC @ 1965-1994', & 1784-1790' w/74 0.48" diameter holes. SDON.
1-15-01 Brk dwn FTC perfs. PT lines to 6000 psi, OK. Frac FTC w/761 bbl 20# lnr gel, 200,000# 20/40 Brady sand, 973,695 SCF N2. Flow back well.
1-16-01 Flow well back.
1-17-01 Blow well.
1-18-01 Alternate blow & flow well.
1-19-01 Flow back well.
1-20-01 TIH w/63 jts 2 3/8" 4.7# J-55 tbg, set @ 1984'. SN @ 1952'. ND BOP. NU WH. RD. Rig released.

14. **I hereby certify that the foregoing is true and correct.**

Signed Peggy Cole Title Regulatory Supervisor Date 1/29/01

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

ACCEPTED FOR RECORD
FEB 07 2001

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-4
(October 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR [X] Other

2. NAME OF OPERATOR: BURLINGTON RESOURCES OIL & GAS COMPANY

3. ADDRESS AND TELEPHONE NO.: PO BOX 4289, Farmington, NM 87499 (505) 326-9700

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1750'FNL, 990'FWL
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: SF-077922
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME, WELL NO.: Hudson J #3
9. API WELL NO.: 30-045-11770
10. FIELD AND POOL, OR WILDCAT: Basin Fruitland Coal/Basin Dakota
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec.35, T-30-N, R-12-W

14. PERMIT NO. / DATE ISSUED:
12. COUNTY OR PARISH: San Juan
13. STATE: New Mexico

15. DATE SPUDDED: 7-22-66
16. DATE T.D. REACHED: 8-4-66
17. DATE COMPL. (Ready to prod.): 1-20-01
18. ELEVATIONS (DF, RKB, RT, BR, ETC.)*: 5857'GR
19. ELEV. CASINGHEAD:
20. TOTAL DEPTH, MD & TVD: 0-6750'
21. PLUG, BACK T.D., MD & TVD: 6400'
22. IF MULTIPLE COMPL., HOW MANY*:
23. INTERVALS DRILLED BY: ROTARY TOOLS 0-6750' / CABLE TOOLS:
24. PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)*: 1784-1994' Fruitland Coal
25. WAS DIRECTIONAL SURVEY MADE: No
26. TYPE ELECTRIC AND OTHER LOGS RUN: GSL, CBL
27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8 5/8	24#	306'	12 1/4	250 sx	
4 1/2	10.5#	6750'	7 7/8	750 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	1984'	SN @ 1952'

31. PERFORATION RECORD (Interval, size and number): 1784-1790', 1965-1994'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1784-1994'	761 bbl 20# lnr gel, 200,000# 20/40 Brady sand, 973,695 SCF N2.

33. PRODUCTION

DATE FIRST PRODUCTION: | PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump): Flowing | WELL STATUS (Producing or shut-in): SI

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PRODN FOR TEST PERIOD	OIL-BBL	GAS-MCF	WATER-BBL	GAS-OIL RATIO
1-20-01			→				

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL	GAS-MCF	WATER-BBL	OIL GRAVITY-API (CORR.)
SI 289	SI 290	→		611 Pitot gauge		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): To be sold
TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Peggy Cole TITLE Regulatory Supervisor DATE 1-29-01

ACCEPTED FOR RECORD

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department of agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FEB 07 2001

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "*Sacks Cement*": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Pictured Cliffs	1995		
Cliffhouse	5505		
Gallup	5626		
Dakota	6[illegible]7		

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683836

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. **Location of Well, Footage, Sec., T, R, M**
1750'FNL, 990'FWL, Sec.35, T-30-N, R-12-W, NMPM

5. **Lease Number**
SF-077922

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

8. **Well Name & Number**
Hudson J #3

9. **API Well No.**
30-045-11770

10. **Field and Pool**
Basin Fruitland Coal/
Basin Dakota

11. **County and State**
San Juan Co, NM

FEB 2001

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission		**Type of Action**			
___	Notice of Intent	___	Abandonment	___	Change of Plans
		_X_	Recompletion	___	New Construction
_X_	Subsequent Report	___	Plugging Back	___	Non-Routine Fracturing
		___	Casing Repair	___	Water Shut off
___	Final Abandonment	___	Altering Casing	___	Conversion to Injection
		_X_	Other - TA Daktoa		

13. **Describe Proposed or Completed Operations**

1-11-01 MIRU. ND WH. NU BOP. TOOH w/1 ½" tbg. TIH w/bit to 6500'. SDON.
1-12-01 TOOH w/bit. TIH w/CIBP, set @ 6400'. PT CIBP & csg to 500 psi/15 min, OK. Ran CBL @ 2250-1550'. TOC @ 1170'. Perf FTC @ 1965-1994', & 1784-1790' w/74 0.48" diameter holes. SDON.
1-15-01 Brk dwn FTC perfs. PT lines to 6000 psi, OK. Frac FTC w/761 bbl 20# lnr gel, 200,000# 20/40 Brady sand, 973,695 SCF N2. Flow back well.
1-16-01 Flow well back.
1-17-01 Blow well.
1-18-01 Alternate blow & flow well.
1-19-01 Flow back well.
1-20-01 TIH w/63 jts 2 3/8" 4.7# J-55 tbg, set @ 1984'. SN @ 1952'. ND BOP. NU WH. RD. Rig released.

14. **I hereby certify that the foregoing is true and correct.**

Signed Peggy Cole Title Regulatory Supervisor Date 1/29/01

TLW

ACCEPTED FOR RECORD

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

FEB 07 2001

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

July 19, 2000

Burlington Resources Oil & Gas Company
P. O. Box 4289
Farmington, New Mexico 87499-4289
Attention: Peggy Cole

Telefax No. (505) 326-9833

JUL 2000
RECEIVED
OIL CON. DIV
DIST. 3

Administrative Order NSL-4491

Dear Ms. Cole:

Reference is made to the following: (i) your application submitted to the New Mexico Oil Conservation Division ("Division") on June 29, 2000; and (ii) the Division's records in Santa Fe: all concerning Burlington Resources Oil & Gas Company's ("Burlington") request for an off-pattern non-standard Basin-Fruitland coal gas well location for the existing Hudson "J" Well No. 3 (**API No. 30-045-11770**), located 1750 feet from the North line and 990 feet from the West line (Unit E) of Section 35, Township 30 North, Range 12 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico.

According to the Division's well records the Hudson "J" Well No. 3 was initially drilled in 1966 by Aztec Oil and Gas Company and completed at a standard gas well location as an initial well in the Basin-Dakota Pool within a standard 320-acre stand-up gas spacing and proration unit comprising the W/2 of Section 35.

It is our understanding that Burlington intends to abandon the Dakota interval in this well at this time and to recomplete up-hole into the Basin-Fruitland Coal (Gas) Pool. Pursuant to the "*Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool*," as promulgated by Division Order No. R-8768, as amended, the location of this well is considered to be unorthodox. Further, the W/2 of Section 35 is to be dedicated to this well in order to form a standard 320-acre stand-up gas spacing and proration unit for the Basin-Fruitland Coal (Gas) Pool.

By the authority granted me under the provisions of Rule 8 of these special pool rules the above-described unorthodox coal gas well location for the Hudson "J" Well No. 3 is hereby approved.

Sincerely,

Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.
SF 077992

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Hudson

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec 35, T-30n, R-12W

12. COUNTY OR PARISH San Juan
13. STATE New Mexico

RECEIVED
AUG 24 1966
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR
Aztec Oil and Gas

3. ADDRESS OF OPERATOR
Drawer 570 Farmington, New Mexico

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 1750 FNL & 990 FWL Sec 35, T-30n, R-12W
At top prod. interval reported below
At total depth

14. PERMIT NO. | DATE ISSUED

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7/20/66	8/4/66	8/15/66	5957 GL	5958

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6750	6738		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
6460 - 6680

25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
Ra - Induction and Density log

27. WAS WELL CORED
No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	306	12-1/4	250	
4-1/2	10.5#	6750	7-7/8	700	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1½	6697	

RECEIVED
AUG 25 1966
OIL CON. COM.
DIST. 3

31. PERFORATION RECORD (*Interval, size and number*)
6460-80, 6540-62, 6567-72, 6580-85, 6668-80
4 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6460-6668-80	1936 Gal. H2O 40,000# 20/40 20,000# 10/20 125 balls

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8/15/66	3	3/4	→		2485		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
170	747	→				

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
Vented

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *Original Signed By Carl E. Jameson* TITLE District Engineer DATE August 23, 1966

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Pictured Cliffs	1995		
Cliffhouse	3605		
Gallup	5686		
Dakota	6537		

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

RECEIVED
AUG 24 1966
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Aztec Oil and Gas

3. ADDRESS OF OPERATOR: Denver 570 Farmington, New Mexico

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 1790 FNL & 990 FWL Sec 35, T-30n, R-13W
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: SF 077922
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME: Bedson
9. WELL NO.: 3
10. FIELD AND POOL, OR WILDCAT: Basin Dakota
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec 35, T-30n, R-13W
12. COUNTY OR PARISH: San Juan
13. STATE: New Mexico

14. PERMIT NO. | DATE ISSUED

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7/20/66	8/4/66	8/15/66	5857 GL	5858

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6750	6738		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 6460 - 6680

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Es - Ind and Density log

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	306	12-1/4	250	
4-1/2	10.5#	6750	7-7/8	700	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1¼	6557	

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OIL CON. COM.
DIST. 3

31. PERFORATION RECORD (*Interval, size and number*)
6460-80, 6540-62, 6567-72, 6580-85, 6668-80
4 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6460-6668-80	1936 bbls H2O 40,000# 20/40 20,000# 10/20 125 bbls

33.* PRODUCTION

DATE FIRST PRODUCTION | PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*) | WELL STATUS (*Producing or shut-in*)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
180	747	→		2485		

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Vented

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: Original Signed By Carl E. Jameson TITLE: District Engineer DATE: August 23, 1966

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Pictured Cliffs	1995		
Cliffhouse	3605		
Gallup	5686		
Dakota	6537		

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-331 C
(May 1963)

Cards + Tabs

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [X]

2. NAME OF OPERATOR: Aztec Oil and Gas Co

3. ADDRESS OF OPERATOR: Drawer 570, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1750 FNL & 990 FWL - Sec 35, T-30N, R-15W
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: SF 078082

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME: Bulgen

9. WELL NO.: 3

10. FIELD AND POOL, OR WILDCAT: Blanco Mesaverde ex Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 35, T-30N, R-15W

12. COUNTY OR PARISH: San Juan

13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH: 6745

20. ROTARY OR CABLE TOOLS: rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5857 GR ungraded

22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼	8-5/8	24#	300 ft	225 sacks
7-7/8	5-1/2	15#	6745 ft	650 sacks (650 sx in stages)

Set 300 ft. 8-5/8" surface casing and cement with 225 sacks
Run 6745 ft. 5½" production casing and cement with 250 sacks
DV tool to be set at base of Mesaverde and Pictured Cliffs and cemented to cover each formation (approx. 650 sx)
Perforate Dakota section and sand water frac.
Set Bridge plug above Dakota and perforate Mesaverde formation
Sand water frac Mesaverde
Clean out and run 1½" tubing with sliding sleeve and produce Dakota through tubing and Mesaverde through casing.

RECEIVED JUN 2 1966 OIL CON. COM. DIST. 3

Proration Unit w/2 Sec 35 -- 320 acres

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED ORIGINAL SIGNED BY JOE C. SALMON TITLE District Superintendent DATE May 27, 1966

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED JUN 1 1966 U. S. GEOLOGICAL SURVEY FARMINGTON, N. M.

*See Instructions On Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

☆ U.S. GOVERNMENT PRINTING OFFICE : 1963—O-711-396

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Aztec Oil & Gas Company	Hudson	3

Unit Letter	Section	Township	Range	County
E	35	30 North	12 West	San Juan

Actual Footage Location of Well: 1750 feet from the North line and 990 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5857	Dakota - Mesaverde	Basin Dakota Flora Vista Mesaverde (Ext)	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

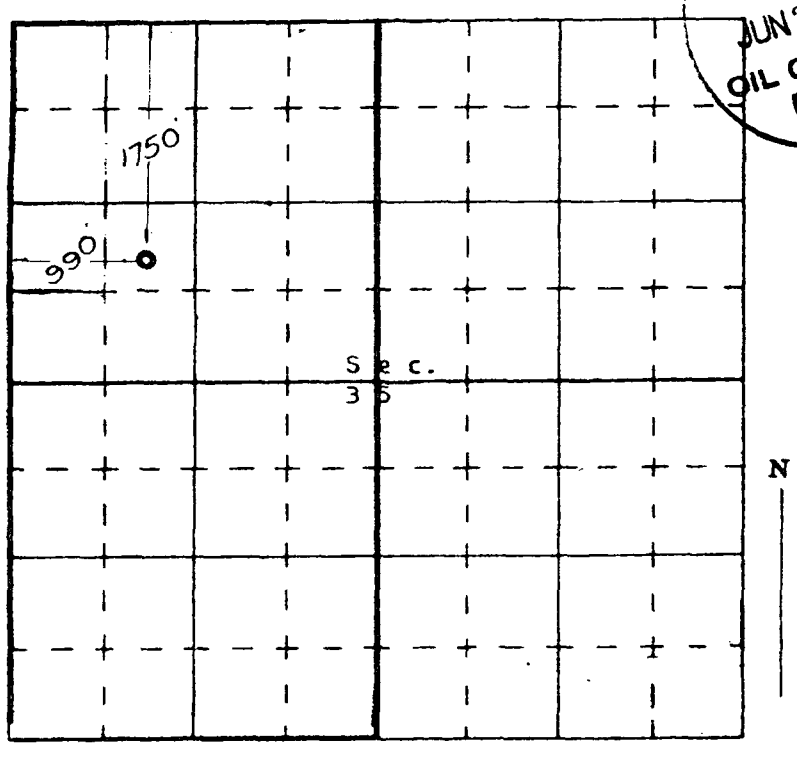
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

(X) Yes ( ) No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) .....

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



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JUN 2 1966
OIL CON. COM.
DIST. 3

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

ORIGINAL SIGNED BY JOE C. SALMON

Name: Joe C. Salmon

Position: District Superintendent

Company: Aztec Oil and Gas

Date: May 27, 1966

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: March 31, 1966

Registered Professional Engineer and/or Land Surveyor

E. V. Echohawk

Certificate No. 3602

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178
FAX: (505) 334-6170
www.emnrd.state.nm.us/ocd/District 3/district3.htm

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test 5/15/06 Operator Merrion Oil & Gas Corporation API #30-045-25844

Property Name CARNAHAN COM Well No. 002 Location: Unit P Section 35 Township 30N Range 12W

Well Status (Shut-In or Producing) Tubing 240 Intermediate ____ Casing 239 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES: BRADENHEAD	INTERMEDIATE	CASING
5 minutes			
10 minutes			
15 minutes			
20 minutes			
25 minutes			
30 minutes			

	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
Steady Flow		
Surges		
Down to Nothing		
Nothing	✓	
Gas		
Gas & Water		
Water		

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR ____ FRESH ____ SALTY ____ SULFUR ____ BLACK ____

JUN 2006

5 MINUTE SHUT-IN BRADENHEAD 0 INTERMEDIATE ____

REMARKS:

By Trigston Merritt

Witness ____

Contract Pumper
(Position)

E-mail address tmerritt@hotmail.com

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease: State [ ] Fee [X]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [ ] GAS WELL [X] OTHER-

7. Unit Agreement Name

2. Name of Operator: Merrion Oil & Gas Corporation

8. Farm or Lease Name: Carnahan Com

3. Address of Operator: P. O. BOx 1017, Farmington, New Mexico 87499

9. Well No.: 2

4. Location of Well: UNIT LETTER P, 1090 FEET FROM THE South LINE AND 1070 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 30N RANGE 12W NMPM.

10. Field and Pool, or Wildcat: Basin Dakota

15. Elevation (Show whether DF, RT, GR, etc.): 5905' GR

12. County: San Juan

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [X]	
		OTHER [ ]	
OTHER [ ]			

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

TD 6780' KB - 6/24/84.
Ran 171 joints 4.5", 10.5 #/ft, J-55 casing set @ 6777' KB with 325 sx (396.5 cu. ft.) Class H cement with 2% gel. 400 sx (488 cu. ft.) Class H cement with 2% gel. 600 sx (1236 cu. ft.) Class B cement with 2% chemical extender. 100 sx (122 cu. ft.) Class B with 2% gel.
Temperature survey found top of cement @ 100'.

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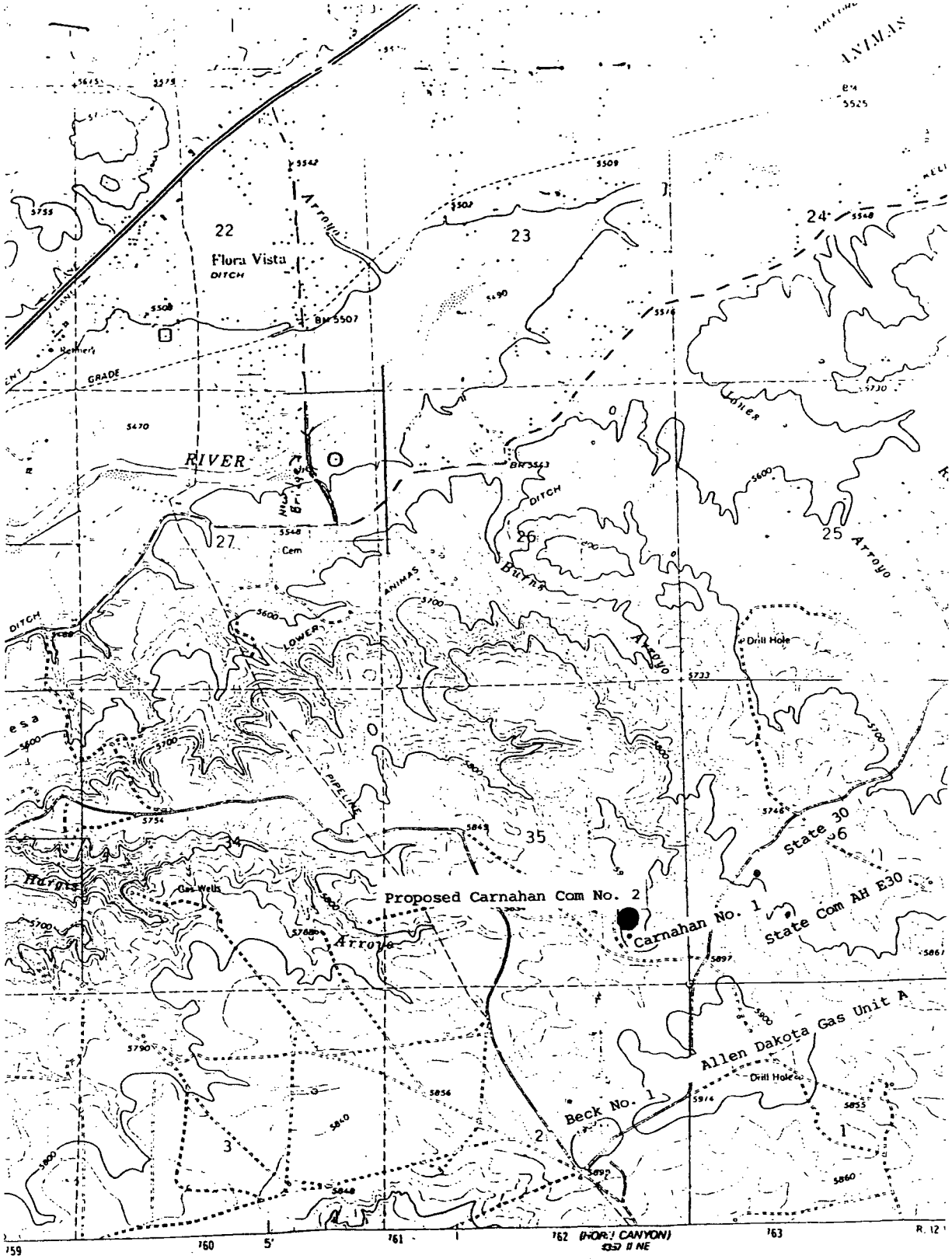
OIL CONSERVATION DIVISION
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED [signature] TITLE Operations Manager DATE 6/27/84

APPROVED BY Original Signed by FRANK T. CHAVEZ TITLE SUPERVISOR DISTRICT # 3 DATE JUN 29 1984



Vicinity Map for
MERRION OIL & GAS CORPORATION #2 CARNAHAN COM
1090'FSL 1070'FEL Sec. 35-T30N-R12W
SAN JUAN COUNTY, NEW MEXICO

NATIONAL GEODETIC VERTICAL DATUM OF 1929

GN MN
1°46' 31 MILS
13° 231 MIL

UTM GRID AND 1979 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 220
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

30-045-25844

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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DIST. 3

FORM C-101
Revised 10-1-78

5A. Indicate Type of Lease
STATE [ ] FEE [X]

5B. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. Unit Agreement Name

8. Farm or Lease Name: Carnahan Com

2. Name of Operator: Merrion Oil & Gas Corporation

9. Well No.: 2

3. Address of Operator: P. O. Box 1017, Farmington, New Mexico 87499

10. Field and Pool, or Wildcat: Basin Dakota

4. Location of Well: UNIT LETTER P LOCATED 1090 FEET FROM THE South LINE AND 1070 FEET FROM THE East LINE OF SEC. 35 TWP. 30N RGE. 12W NMPM

12. County: San Juan

19. Proposed Depth: 6800
19A. Formation: Dakota
20. Rotary or C.T.: Rotary

21. Elevations (Show whether DF, RT, etc.): 5905 GL
21A. Kind & Status Plug. Bond: Nationwide
21B. Drilling Contractor: Unknown
22. Approx. Date Work will start: Winter, 83-84

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	8-5/8"	24 #/ft	200 ft.	170 sx	Surface
7-7/8"	4-1/2"	10.5 #/ft	6800 ft.	710 sx	Above Ojo Alam

Drill 12-1/4" hole to 200 ft. Run 8-5/8", 24 #/ft, J-55 surface casing to 200 ft and cement with 170 sx Class B, 2% $CaCl_2$. Drill 7-7/8" hole to 6800 ft with low solids, gel-freshwater mud. Run open hole logs. If appears productive, run 4-1/2", 10.5 #/ft, J-55 casing to TD and cement in three stages to cover Dakota, Gallup, Mesa Verde, Pictured Cliffs and Ojo Alamo. 1st Stage with 300 sx Class h, 2% gel to cover Dakota and Gallup. 2nd Stage with 110 sx Class B, 2% D-79, tail in with 50 sx Class H, 2% gel to cover Mesa Verde. 3rd Stage with 200 sx Class B, 2% D-79, tail in with 50 sx Class H, 2% gel to cover Pictures Cliffs and Ojo Alamo. Will perforate and frac as deemed necessary. Will use Double Ram 10" 900 Series BOPs during drilling.

ESTIMATED TOPS

Ojo Alamo	600'	Mesa Verde	3755'
Kirtland	800'	Mancos	4695'
Fruitland	1660'	Gallup	5680'
Pictures Cliffs	2050'	Greenhorn	6400'
Lewis	2230'	Dakota	6518'

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Operations Manager Date 11/17/83

(This space for State Use)

APPROVED BY [signature] TITLE DISTRICT # 3 DATE May 21, 1984

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
MERRION OIL & GAS CORPORATION	CARNAHAN COM	2

Unit Letter	Section	Township	Range	County
P	35	30N	12W	San Juan

Actual Footage Location of Well: 1090 feet from the South line and 1070 feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
5905	Dakota	Basin Dakota	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

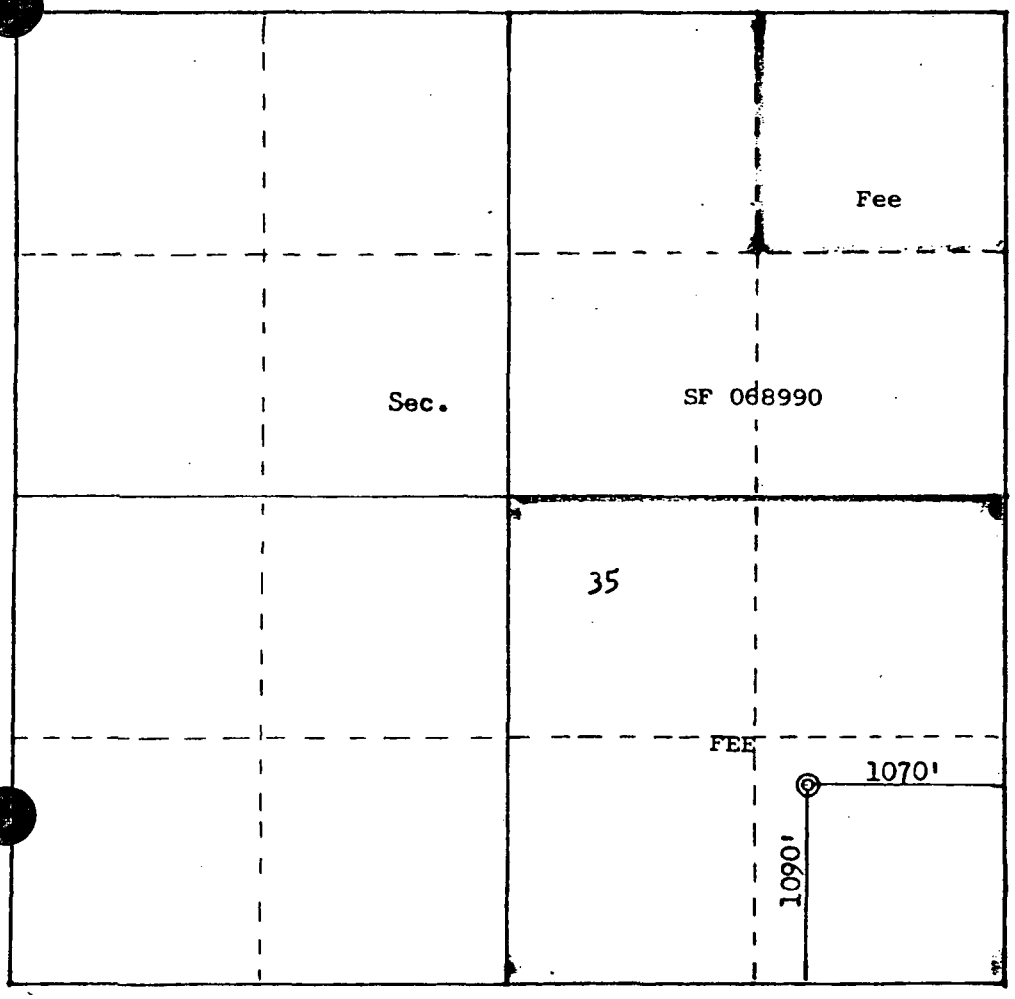
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

[X] Yes [ ] No If answer is "yes," type of consolidation Communitized

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Steve S. Dunn

Position: Operations Manager

Company: Merrion Oil & Gas Corporation

Date: 11/17/83

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: September 1, 1983

Registered Professional Engineer and Land Surveyor: Fred B. Kerr Jr.

Certificate No. 2050

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TRANSPORTER GAS		
OPERATOR		
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NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-
Effective 1-1-65

Operator: Merrion Oil & Gas Corporation

Address: P. O. Box 1017, Farmington, New Mexico 87499

Reason(s) for filing (Check proper box): New Well [X]; Recompletion [ ]; Change in Ownership [ ]; Change in Transporter of: Oil [ ], Dry Gas [ ], Casinghead Gas [ ], Condensate [ ]

Other (Please explain):

If change of ownership give name and address of previous owner _____

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
Carnahan Com	2	Basin Dakota	Fee	

Location: Unit Letter P : 1090 Feet From The South Line and 1070 Feet From The East

Line of Section 35 Township 30N Range 12W, NMPM, San Juan County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
Permian Corporation	P. O. Box 1017, Farmington, New Mexico 87499
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]	Address (Give address to which approved copy of this form is to be sent)
El Paso Natural Gas Co.	P. O. Box 4990, Farmington, New Mexico 87499

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	P	35	30N	12W	No	As soon as possible

If this production is commingled with that from any other lease or pool, give commingling order number: _____

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		XX	XX					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
6/15/84	7/23/84	6780' KB	6735' KB
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
5918' KB, 5905' GL	Dakota	6529' KB	6530' KB

Perforations: 6529, 6538, 6541, 6617, 6620, 6625, 6629, 6632, 6700, 6705, 6710, 6714, 12 holes

Depth Casing Shoe: 6777' KB

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12-1/4	8-5/8", 24 #/ft. J-55	230' KB	170 sx (350 cu. ft.) B
7-7/8"	4-1/2", 10.5 #/ft, J-55	6777' KB	400 sx (488 cu. ft.) H
			600 sx (1236 cu. ft.) B
	2 3/8	6530	100 sx (122 cu. ft.) B
			395 sx (396.5 cu. ft.) H

TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	**Tubing Pressure**	**Casing Pressure** / **Choke Size**
Actual Prod. During Test	**Oil - Bbls.**	**Water - Bbls.** / **Gas - MCF**

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DIST. 3

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
603 MCF/D	3 hours	2	48°
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Backpressure for test	1500 PSI	1530 PSI	20/64

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

(Signature)

Steve S. Dunn, Operations Manager
(Title)

OIL CONSERVATION COMMISSION

APPROVED AUG 07 1984, 19 _____

Original Signed by FRANK T. CHAVEZ

BY _____

TITLE SUPERVISOR DISTRICT # 3

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepe well, this form must be accompanied by a tabulation of the devia tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for all able on new and recompleted wells.