

OK

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NATURAL RESOURCE
AND OIL & GAS ADMINISTRATION

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

APPROVED

Operator: ELM RIDGE RESOURCES Telephone: (505) 326-7099

Address: 312 W. LA PLATA STREET, FARMINGTON, NM 87401

Facility or Well Name: JICARILLA APACHE B #10

Location: Unit or Qtr/Qtr Sec K Sec 20 T24N R5W County Rio ARAGUA

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type:

Pit Location: Pit dimensions: length 30, width 70, depth 12
(Attach diagram)

Reference: wellhead ☒ other ☐

Footage from reference: 80'

Direction from reference: NW Degrees East North ☒
X West South

Depth To Groundwater:

(Vertical distance from
contaminants to seasonal
high water elevation of
groundwater)

Less than 50 feet	(20 points)	
50 feet to 99 feet	(10 points)	
Greater than 100 feet	(0 points)	<u>0</u>

Distance to an Ephemeral Stream

(Downgradient dry wash greater than
ten feet in width)

Less than 100 feet	(10 points)	
Greater than 100 feet	(0 points)	<u>0</u>

Distance to Nearest Lake, Playa, or Watering Pond

(Downgradient lakes, playas and
livestock or wildlife watering ponds)

Less than 100 feet	(10 points)	
Greater than 100 feet	(0 points)	<u>0</u>

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or: less than
1000 feet from all other water sources)

Yes	(20 points)	
No	(0 points)	<u>0</u>

Distance To Surface Water:

(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 100 feet	(20 points)	
100 feet to 1000 feet	(10 points)	
Greater than 1000 feet	(0 points)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 8/8/97 Date Completed: 4/20/98

Remediation Method: Excavation X Approx. cubic yards 933

(Check all appropriate sections)

Landfarmed X

In situ Bioremediation _____

Other _____

Remediation Location: Onsite X Offsite _____
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: REMOVED CONTAMINATED SOIL, SPREAD
ON LOCATION IN SOIL FARM

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location PIT Bottom - center 4 BANK N, S, E, W

Closure Sampling:

(if multiple samples, attach sample results

and diagram of sample locations and depths)

Sample depth 10-11'

GAS ND (PPB)

DIE ND (PPM)

Sample date 4/20/98

Sample time 1:17 PM

METHOD: BOISM

Sample Results

PID = 17.2

Soil Benzene (ppm) N/A Water: Benzene (ppb) N/A

Total BTEX (ppm) N/A Toluene (ppb) N/A

Field Headspace (ppm) 23.2 Ethylbenzene (ppb) N/A

TPH BOISM (ppm) GAS ND (PPB) Total Xylenes (ppb) N/A

DIE 50 (PPM)

Groundwater Sample: Yes _____ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 5/26/98 PRINTED NAME SHAWN ADAMS

SIGNATURE [Signature] AND TITLE ENV. CONSULTANT

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) _____

SIGNED: [Signature] DATE: 5/27/98

CONTRACT ENVIRONMENTAL

DATE 4/29/98

TIME STARTED 13:00

TIME FINISHED 13:35

SITE NAME Sycarilla Alaska "B" well 10 Sep

PIT SIZE AT START x x PIT SIZE WHEN FINISHED x x

P.I.D READINGS

NORTH WALL #1 _____ #2 _____ #3 _____ FINALE TIME _____

SOUTH WALL #1 _____ #2 _____ #3 _____ FINALE TIME _____

EAST WALL #1 _____ #2 _____ #3 _____ FINALE TIME _____

WEST WALL #1 _____ #2 _____ #3 _____ FINALE TIME _____

WALL COMPOSITE #1 17.2 #2 _____ #3 _____ FINALE TIME 13:15

FLOOR #1 23.2 #2 _____ #3 _____ FINALE TIME 13:17

LAND FARM 3.4 SAMPLE TIME 13:20

SPOIL PILE _____ SAMPLE TIME _____

REMARKS: Rock at 6'

Soil
Farm

WHERE
@

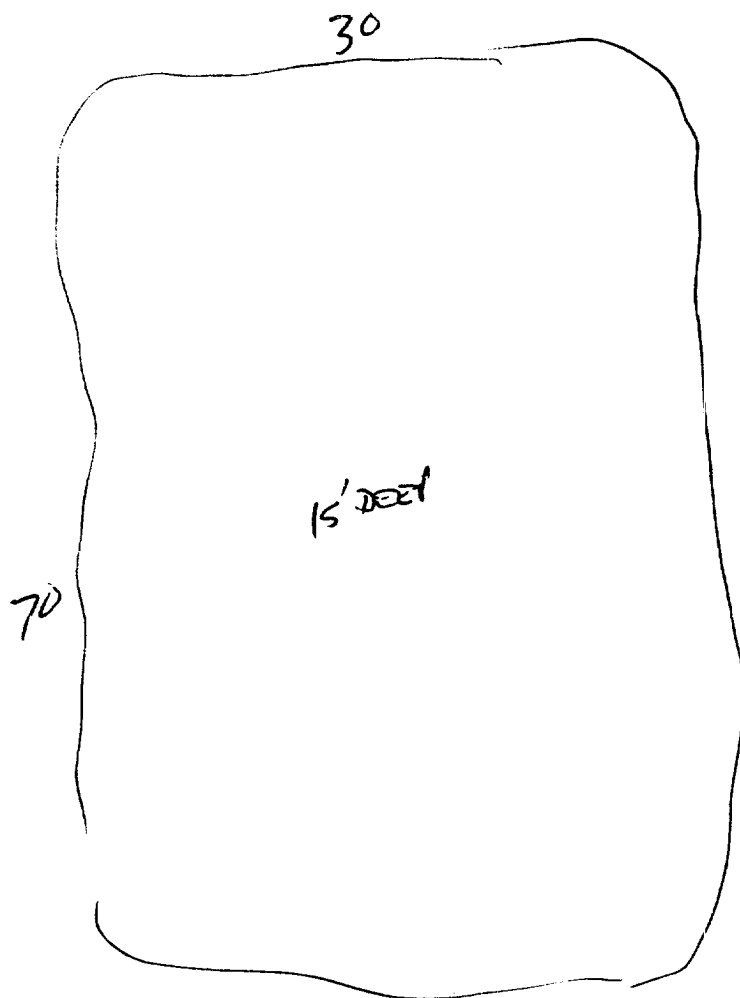
FLDS

400
BBL

Σ
E
P

Fiber
glass
pit

400
BBL



OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Apr-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Jicarilla Apache "B" Well 10
Work Order:	9804029	Client Sample ID:	JB10-101 Floor Sep.
Lab ID:	9804029-02A	Matrix:	SOIL
Project:	Jicarilla Apache "B"	Collection Date:	4/20/98 1:17:00 PM
		COC Record:	4317

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	50	25		mg/Kg	1	Analyst: DC 4/24/98
GASOLINE RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C6-C10	ND	180		µg/Kg	1	Analyst: HR 4/23/98
Surr: Trifluorotoluene	103.2	70-130		%REC	1	4/23/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Apr-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Jicarilla Apache "B" Well 10
Work Order:	9804029	Client Sample ID:	JB10-100 Wall Sep.
Lab ID:	9804029-01A	Matrix:	SOIL
Project:	Jicarilla Apache "B"	Collection Date:	4/20/98 1:15:00 PM
		COC Record:	4317

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	Analyst: DC 4/24/98
GASOLINE RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C6-C10	ND	180		µg/Kg	1	Analyst: HR 4/23/98
Surr: Trifluorotoluene	88.4	70-130		%REC	1	4/23/98

Qualifiers:

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E - Value above quantitation range

Surr: - Surrogate

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ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT COPY TO:
NATURAL RESOURCE DEPT.
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

APPROVED

Operator: ELM RIDGE RESOURCES Telephone: (505) 326-7099

Address: 312 W. LAPLATA STREET, FARMINGTON, NM 87401

Facility or Well Name: JICARILLA APACHE "B" WELL #10 SEP LANDFARM

Location: Unit or Qtr/Qtr Sec K Sec 20 T 24N R 5W County RIO ARriba

Land Type: _____

Date Remediation Started: 8/8/97 Date Completed: 4/20/98

Remediation Method: Landfirmed X Approx. cubic yards 933

Composted _____

Other _____

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

Final Closure Sampling:

Sampling Date: 4/20/98 Time: 1:20

Sample Results:

Field Headspace (ppm) 3.4 ppm

TPH (ppm) GAS-ND Method 8015M
DEC-ND

Other _____

RANKING SCORE (TOTAL POINTS):

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 12/22/98 PRINTED NAME SHAWN ADAMS

SIGNATURE Shawn Adams AND TITLE ENV. CONSULTANT

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) May be used as backfill, as needed.

SIGNED: Karena L. Callado DATE: 22 DEC 98

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Apr-98

Client: Contract Environmental Services, Inc.
Work Order: 9804029
Lab ID: 9804029-03A **Matrix:** SOIL
Project: Jicarilla Apache "B"

Client Sample Info: Jicarilla Apache "B" Well 10
Client Sample ID: JB10-102 Land Farm Sep.
Collection Date: 4/20/98 1:20:00 PM
COC Record: 4317

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	Analyst: DC 4/24/98
GASOLINE RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C6-C10	ND	180		µg/Kg	1	Analyst: HR 4/23/98
Surr: Trifluorotoluene	106.0	70-130		%REC	1	4/23/98

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R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

TECHNOLOGIES, LTD. 657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.		
Name: <u>Sam Shuman Adams</u>		Title:		
Company: <u>Contract Enviro</u>		Company:		
Address: <u>P.O. Box 3776</u>		Mailing Address:		
City, State, Zip: <u>Albuquerque NM 87106</u>		City, State, Zip:		
Telephone No.:		Telephone No.:		
Telefax No.:		Telefax No.:		
Sampling Location: <u>Jicarilla Apache "B" well</u>		ANALYSIS REQUESTED		
Sampler: <u>James R. Kelly</u>		ANALYSIS REQUESTED		
SAMPLE IDENTIFICATION				
SEND INVOICE TO	Name	SAMPLE		LAB ID
		DATE	TIME	
JB10 100	well	4/24/98	13:15	Soil
JB10 101	Floor	4/24/98	13:17	Soil
JB10 102	land Farm	4/24/98	13:20	Soil
JB10 103	well	4/24/98	13:25	Soil
JB10 104	Floor	4/24/98	13:27	Soil
JB10 105	land Farm	4/24/98	13:30	Soil
JB10 106	well	4/24/98	13:35	Soil
JB10 107	Floor	4/24/98	14:05	Soil
JB12 108	land Farm	4/24/98	14:10	Soil
JB12 109	well	4/24/98	14:15	Soil
JB12 110	Floor	4/24/98	14:22	Soil
JB12 111	land Farm	4/24/98	14:28	Soil
JB12 112	well	4/24/98	14:35	Soil
JB12 113	Floor	4/24/98	14:40	Soil
JB12 114	land Farm	4/24/98	14:45	Soil
JB12 115	well	4/24/98	14:50	Soil
JB12 116	Floor	4/24/98	14:55	Soil
JB12 117	land Farm	4/24/98	15:00	Soil
JB12 118	well	4/24/98	15:05	Soil
JB12 119	Floor	4/24/98	15:10	Soil
JB12 120	land Farm	4/24/98	15:15	Soil
JB12 121	well	4/24/98	15:20	Soil
JB12 122	Floor	4/24/98	15:25	Soil
JB12 123	land Farm	4/24/98	15:30	Soil
JB12 124	well	4/24/98	15:35	Soil
JB12 125	Floor	4/24/98	15:40	Soil
JB12 126	land Farm	4/24/98	15:45	Soil
JB12 127	well	4/24/98	15:50	Soil
JB12 128	Floor	4/24/98	15:55	Soil
JB12 129	land Farm	4/24/98	16:00	Soil
JB12 130	well	4/24/98	16:05	Soil
JB12 131	Floor	4/24/98	16:10	Soil
JB12 132	land Farm	4/24/98	16:15	Soil
JB12 133	well	4/24/98	16:20	Soil
JB12 134	Floor	4/24/98	16:25	Soil
JB12 135	land Farm	4/24/98	16:30	Soil
JB12 136	well	4/24/98	16:35	Soil
JB12 137	Floor	4/24/98	16:40	Soil
JB12 138	land Farm	4/24/98	16:45	Soil
JB12 139	well	4/24/98	16:50	Soil
JB12 140	Floor	4/24/98	16:55	Soil
JB12 141	land Farm	4/24/98	17:00	Soil
JB12 142	well	4/24/98	17:05	Soil
JB12 143	Floor	4/24/98	17:10	Soil
JB12 144	land Farm	4/24/98	17:15	Soil
JB12 145	well	4/24/98	17:20	Soil
JB12 146	Floor	4/24/98	17:25	Soil
JB12 147	land Farm	4/24/98	17:30	Soil
JB12 148	well	4/24/98	17:35	Soil
JB12 149	Floor	4/24/98	17:40	Soil
JB12 150	land Farm	4/24/98	17:45	Soil
JB12 151	well	4/24/98	17:50	Soil
JB12 152	Floor	4/24/98	17:55	Soil
JB12 153	land Farm	4/24/98	18:00	Soil
JB12 154	well	4/24/98	18:05	Soil
JB12 155	Floor	4/24/98	18:10	Soil
JB12 156	land Farm	4/24/98	18:15	Soil
JB12 157	well	4/24/98	18:20	Soil
JB12 158	Floor	4/24/98	18:25	Soil
JB12 159	land Farm	4/24/98	18:30	Soil
JB12 160	well	4/24/98	18:35	Soil
JB12 161	Floor	4/24/98	18:40	Soil
JB12 162	land Farm	4/24/98	18:45	Soil
JB12 163	well	4/24/98	18:50	Soil
JB12 164	Floor	4/24/98	18:55	Soil
JB12 165	land Farm	4/24/98	19:00	Soil
JB12 166	well	4/24/98	19:05	Soil
JB12 167	Floor	4/24/98	19:10	Soil
JB12 168	land Farm	4/24/98	19:15	Soil
JB12 169	well	4/24/98	19:20	Soil
JB12 170	Floor	4/24/98	19:25	Soil
JB12 171	land Farm	4/24/98	19:30	Soil
JB12 172	well	4/24/98	19:35	Soil
JB12 173	Floor	4/24/98	19:40	Soil
JB12 174	land Farm	4/24/98	19:45	Soil
JB12 175	well	4/24/98	19:50	Soil
JB12 176	Floor	4/24/98	19:55	Soil
JB12 177	land Farm	4/24/98	20:00	Soil
JB12 178	well	4/24/98	20:05	Soil
JB12 179	Floor	4/24/98	20:10	Soil
JB12 180	land Farm	4/24/98	20:15	Soil
JB12 181	well	4/24/98	20:20	Soil
JB12 182	Floor	4/24/98	20:25	Soil
JB12 183	land Farm	4/24/98	20:30	Soil
JB12 184	well	4/24/98	20:35	Soil
JB12 185	Floor	4/24/98	20:40	Soil
JB12 186	land Farm	4/24/98	20:45	Soil
JB12 187	well	4/24/98	20:50	Soil
JB12 188	Floor	4/24/98	20:55	Soil
JB12 189	land Farm	4/24/98	21:00	Soil
JB12 190	well	4/24/98	21:05	Soil
JB12 191	Floor	4/24/98	21:10	Soil
JB12 192	land Farm	4/24/98	21:15	Soil
JB12 193	well	4/24/98	21:20	Soil
JB12 194	Floor	4/24/98	21:25	Soil
JB12 195	land Farm	4/24/98	21:30	Soil
JB12 196	well	4/24/98	21:35	Soil
JB12 197	Floor	4/24/98	21:40	Soil
JB12 198	land Farm	4/24/98	21:45	Soil
JB12 199	well	4/24/98	21:50	Soil
JB12 200	Floor	4/24/98	21:55	Soil
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JB12 202	well	4/24/98	22:05	Soil
JB12 203	Floor	4/24/98	22:10	Soil
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JB12 205	well	4/24/98	22:20	Soil
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JB12 208	well	4/24/98	22:35	Soil
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JB12 210	land Farm	4/24/98	22:45	Soil
JB12 211	well	4/24/98	22:50	Soil
JB12 212	Floor	4/24/98	22:55	Soil
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JB12 214	well	4/24/98	23:05	Soil
JB12 215	Floor	4/24/98	23:10	Soil
JB12 216	land Farm	4/24/98	23:15	Soil
JB12 217	well	4/24/98	23:20	Soil
JB12 218	Floor	4/24/98	23:25	Soil
JB12 219	land Farm	4/24/98	23:30	Soil
JB12 220	well	4/24/98	23:35	Soil
JB12 221	Floor	4/24/98	23:40	Soil
JB12 222	land Farm	4/24/98	23:45	Soil
JB12 223	well	4/24/98	23:50	Soil
JB12 224	Floor	4/24/98	23:55	Soil
JB12 225	land Farm	4/24/98	00:00	Soil
JB12 226	well	4/24/98	00:05	Soil
JB12 227	Floor	4/24/98	00:10	Soil
JB12 228	land Farm	4/24/98	00:15	Soil
JB12 229	well	4/24/98	00:20	Soil
JB12 230	Floor	4/24/98	00:25	Soil
JB12 231	land Farm	4/24/98	00:30	Soil
JB12 232	well	4/24/98	00:35	Soil
JB12 233	Floor	4/24/98	00:40	Soil
JB12 234	land Farm	4/24/98	00:45	Soil
JB12 235	well	4/24/98	00:50	Soil
JB12 236	Floor	4/24/98	00:55	Soil
JB12 237	land Farm	4/24/98	01:00	Soil
JB12 238	well	4/24/98	01:05	Soil
JB12 239	Floor	4/24/98	01:10	Soil
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JB12 243	land Farm	4/24/98	01:30	Soil
JB12 244	well	4/24/98	01:35	Soil
JB12 245	Floor	4/24/98	01:40	Soil
JB12 246	land Farm	4/24/98	01:45	Soil
JB12 247	well	4/24/98	01:50	Soil
JB12 248	Floor	4/24/98	01:55	Soil
JB12 249	land Farm	4/24/98	02:00	Soil
JB12 250	well	4/24/98	02:05	Soil
JB12 251	Floor	4/24/98	02:10	Soil
JB12 252	land Farm	4/24/98	02:15	Soil
JB12 253	well	4/24/98	02:20	Soil
JB12 254	Floor	4/24/98	02:25	Soil
JB12 255	land Farm	4/24/98	02:30	Soil
JB12 256	well	4/24/98	02:35	Soil
JB12 257	Floor	4/24/98	02:40	Soil
JB12 258	land Farm	4/24/98	02:45	Soil
JB12 259	well	4/24/98	02:50	Soil
JB12 260	Floor	4/24/98	02:55	Soil
JB12 261	land Farm	4/24/98	03:00	Soil
JB12 262	well	4/24/98	03:05	Soil
JB12 263	Floor	4/24/98	03:10	Soil
JB12 264	land Farm	4/24/98	03:15	Soil
JB12 265	well	4/24/98	03:20	Soil
JB12 266	Floor	4/24/98	03:25	Soil
JB12 267	land Farm	4/24/98	03:30	Soil
JB12 268	well	4/24/98	03:35	Soil
JB12 269	Floor	4/24/98	03:40	Soil
JB12 270	land Farm	4/24/98	03:45	Soil
JB12 271	well	4/24/98	03:50	Soil
JB12 272	Floor	4/24/98	03:55	Soil
JB12 273	land Farm	4/24/98	04:00	Soil
JB12 274	well	4/24/98	04:05	Soil
JB12 275	Floor	4/24/98	04:10	Soil
JB12 276	land Farm	4/24/98	04:15	Soil
JB12 277	well	4/24/98	04:20	Soil
JB12 278	Floor	4/24/98	04:25	Soil
JB12 279	land Farm	4/24/98	04:30	Soil
JB12 280	well	4/24/98	04:35	Soil
JB12 281	Floor	4/24/98	04:40	Soil
JB12 282	land Farm	4/24/98	04:45	Soil
JB12 283	well	4/24/98	04:50	Soil
JB12 284	Floor	4/24/98	04:55	Soil
JB12 285	land Farm	4/24/98	05:00	Soil
JB12 286	well	4/24/98	05:05	Soil
JB12 287	Floor	4/24/98	05:10	Soil
JB12 288	land Farm	4/24/98	05:15	Soil
JB12 289	well	4/24/98	05:20	Soil
JB12 290	Floor	4/24/98	05:25	Soil
JB12 291	land Farm	4/24/98	05:30	Soil
JB12 292	well	4/24/98	05:35	Soil
JB12 293	Floor	4/24/98	05:40	Soil
JB12 294	land Farm	4/24/98	05:45	Soil
JB12 295	well	4/24/98	05:50	Soil