

SB # (MISSING

SITE HAS NOT BEEN SUFFIEGATEY DELI NENTED TO PROPOSE INVENTIONS

July 19, 2004

Mr. Larry Johnson State of New Mexico Oil Conservation Division 1625 French Drive Hobbs, New Mexico 88240

Re: Preliminary Site Investigation Report and Remediation Plan Plains Marketing – Chevron-Texaco Monument 12 Site NE/4, SW/4, Section 12, T19S, R36E Lea County, New Mexico Plains EMS No.: 2004-00142

Dear Mr. Johnson:

Please find attached a copy of the Preliminary Site Investigation and Remediation Plan for the above-referenced site. This crude oil release occurred in early May 2004 and is located at an active Chevron-Texaco tank battery. Partial excavation of the impacted production pad has been conducted and the release has been delineated. Based on the location of this release on an active production site, Plains Marketing and Chevron-Texaco request an expedited review of the investigation report and proposed remediation plan. Upon your approval of this plan, Plains will expedite remediation activities.

Should you have any questions or comments concerning the proposed remediation plan, please contact me at (713) 646-4657 or Doug Kennedy at (713) 646-4610.

Sincerely,

effrey P. Dann, P.G.

Sr. Environmental Specialist Plains All American

CC: Nathan Mouser, Chevron-Texaco

File: c/jeff-files/2004-00142-OCDcover1

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Plains Marketing GP Inc., General Partn

333 Clay Street, Suite 1600 (77002) 🗰 P.O. Box 4648 🗰 Houston, Texas 77210-4648 🗰 713/646-4100

PRELIMINARY SITE INVESTIGATION REPORT and REMEDIATION PLAN

PLAINS MARKETING L.P. CHEVRON-TEXACO MONUMENT 12 Lea County, New Mexico NE ¼ SW ¼ Section 12, Township 19S, Range 36E

Prepared For:

Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, Texas 77002 EMS No. 2004-00142

Prepared By: Allstate Environmental Services, LLC P. O. Box 11322 Midland, Texas 79702

06July 2004

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Ken Dutton Allstate Environmental Services, LLC

INTRODUCTION

Allstate Environmental Services, LLC (AES) conducted a subsurface investigation of a transport truck release for Plains Marketing L.P., located on the Chevron-Texaco Monument 12 lease. The investigation was conducted in order to document subsurface conditions resulting from a release of crude oil at this facility.

This site is located in NE¼ of the SW¼, Section 12, Township 19 South, Range 36 East in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site is characterized by a producing well and a tank battery. The stained area is located in the middle of the gravel pad and to the east of the tank battery covering an area approximately 150 feet by 70 feet. Approximately 92 barrels of crude oil were released from a Plains Marketing transport truck and approximately 25 barrels were recovered.

An Emergency One-Call was initiated 10 May 2004 and all affected companies either cleared or marked their respective lines.

Mr. Leon Anderson, New Mexico State Land Office was notified and visited the site to ascertain the extent the release. Mr. Larry Johnson, New Mexico Oil Conservation Division, Hobbs District 1 was verbally notified of the release on May 9, 2004.

SUMMARY OF FIELD ACTIVITIES

On 10 May 2004, AES employee Bobby Blackwood arrived at the Chevron-Texaco Monument 12 tank battery to conduct a preliminary site investigation and determine the nature and extent of hydrocarbon impact of the area. The area directly east of the tank battery contained an electrical panel with numerous 480-volt lines powering the equipment inside the tank battery (see Figure 2). Due to safety concerns, hand excavation to expose these lines was initiated prior to mechanized excavation. The area east of the Power Panel, approximately 36 feet by 45 feet was excavated to approximately 4 feet below ground surface (bgs) and the contaminated soil and caliche placed on a 40-mil plastic liner. The Power Panel was relocated and excavation was initiated in an area approximately 96 feet by 60 feet to a depth of approximately 5 feet bgs. This impacted soil and caliche was also placed on a 40-mil plastic liner.

On May 12, 2004, AES employee Ken Dutton installed 7 soil borings, utilizing Straub Corporation, Stanton, Texas, collecting representative soil samples every 5 feet in order to delineate the horizontal and vertical contamination of the transport truck release (a Site Plan is attached as Figure 2). These soil borings were installed at the release point and continued within the visually stained area. The soil borings ranged in depth of 35 feet bgs to 60 feet bgs (soil boring logs are attached). Each sample was screened with a photoionization detector (PID) calibrated 12 May 2004. The soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX),

total petroleum hydrocarbons - gasoline range organics/diesel range organics (TPH-GRO/DRO).

A search of the New Mexico State Engineers database revealed a depth to water of 40 feet bgs; however, the actual depth to water at this location is 58 feet to 60 feet bgs based on installation of the soil borings. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of >19, which sets the remediation levels at:

10 ppm Benzene:

BTEX: 50 ppm

TPH: 100 ppm

Distribution of Hydrocarbons in the Unsaturated Zone

On initiation of the site investigation, soil samples were collected in the subsurface from the soil borings at 5 feet intervals utilizing a drill rig to determine the vertical extent of hydrocarbon contamination in the soil. No visual observation of free phase crude oil was encountered during the installation of the 7 soil borings or excavation of the east area. A PID reading of 1568 ppm was recorded from a surface sample in the impacted east area. PID field screenings were utilized to determine which soil samples were to be submitted to the laboratory for analysis. Laboratory data sheets and chain-of-custody form are attached.

Soil Boring 1, as depicted on the site map, was installed in the east area. Samples SB^{\pm} Not collected at the 5, 15, 20 and 25 feet has were applying the batteries. collected at the 5, 15, 20 and 25 feet bgs were analyzed. The bottom hole, 35 feet 2^{n} Analytical results ATTACTION bgs sample was additionally analyzed for BTEX and TPH. indicated that BTEX was below NMOCD regulatory standards on all soil samples. Analytical results indicated that TPH was below NMOCD regulatory standards at the 5, 15, 20 and 35 feet bgs. The 25 feet bgs sample exceeded the NMOCD regulatory standard at 173 mg/kg.

Soil Boring 2, as depicted on the site map, was installed in the far east area and BTEX and TPH concentrations were not detected above the laboratory method detection limits on the 20 and 35 feet bgs soil samples.

Soil Boring 3, as depicted on the site map, was installed in the east area adjacent to the tank battery fence. The 5 feet bgs soil sample indicated BTEX was below NMOCD regulatory standards and TPH exceeded NMOCD regulatory standards at 303 mg/kg. The 35 feet bgs soil sample was non-detect for BTEX and TPH.

Soil Boring 4, as depicted on the site map, was installed in the east area adjacent to the tank battery fence. The 5 feet bgs soil sample indicated BTEX was below

NMOCD regulatory standards and TPH exceeded NMOCD regulatory standards at 243 mg/kg. The 35 feet bgs sample indicated that BTEX and TPH were below NMOCD regulatory standards.

Soil Boring 5, as depicted on the site map, was installed at the release point. This soil boring was drilled into the vadose zone and a soil sample collected. Analytical results indicated that the 25 feet and 59 feet bgs soil samples were below NMOCD regulatory standards for BTEX and TPH.

Soil Boring 6, as depicted on the site map, was installed in the middle of the production pad. This soil boring was drilled into the vadose zone and a soil sample collected. Analytical results indicated that BTEX was below the NMOCD regulatory standards at 5, 20, 25 and 59 feet bgs collection levels. TPH was above NMOCD regulatory standards at the 5, 20 and 25 feet bgs at concentrations of 182 mg/kg, 106 mg/kg, and 164 mg/kg, respectively.

Soil Boring 7, as depicted on the site map, was installed in the east area. This soil boring was drilled into the vadose zone and a sample collected. Analytical results indicated that BTEX and TPH were below NMOCD regulatory standards.

CLOSURE PROPOSAL FOR SITE SOIL

Approximately 1758 cubic yards of hydrocarbon impacted soil remains at the site and is represented by approximately five feet of impacted soil remaining beneath the excavation floor. It is proposed to isolate the remaining source term with an impermeable barrier constructed of dense compactable red clay with a minimum permeability of 1 X 10⁻⁵ cm/sec. The barrier will extend a minimum of four feet bevond the edges of soil impacted above the NMOCD remedial thresholds and will be a minimum of one-foot thick. The barrier will be installed in six-inch lifts, compacted and tested to verify that the compaction has achieved a minimum of 95% its Proctor Density. Installation of the clay barrier at a depth of approximately six feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural biodegradation of contaminants in the soil. After the barrier has been installed and tested to be acceptable, the excavation will be backfilled with rock separated from the stockpiled soil (pursuant to standard NMOCD practices). Soil separated from the rock will be sampled for TPH and BTEX at a rate of one sample per 250 cubic yards. Soil with TPH concentration less than 100 ppm, benzene concentrations less than 10 ppm and total BTEX concentrations less than 50 ppm will be utilized as backfill. Soil, which exceeds these criteria, will be removed and transported to Plains Centralized Land Farm at Lea Station.

RECOMMENDATIONS FOR REMEDIATION

The east area adjacent to the tank battery has been excavated to an approximate depth of 4 feet bgs. The release point and middle of the tank battery pad have not been excavated. Due to the remote area of this location and lack of receptors it is recommended that the following actions be taken.

- PID readings taken at the 4 feet bgs depth interval indicated VOC levels of well below 100 ppm. It is recommended that confirmation soil samples be collected in the east area to document contaminate levels. Based on the results of the soil delineation investigation, it is recommended that a 1-foot thick clay cap barrier be installed to inhibit vertical migration of contaminates in soil left in place below the cap. Plains proposes to mechanically separate the rock and soil and the rock will be placed back in the excavation over the cap. The separated (impacted) soil will be sampled and analyzed for TPH and BTEX to determine if regulatory standards have been met and possibly be utilized as backfill. If the separated soil cannot meet NMOCD regulatory standards it will be transported to a certified New Mexico land farm.
- Excavate the middle of the tank battery pad (release area) to a depth of 5 to 6 feet bgs and stockpile. It is recommended that confirmation soil samples be collected in the middle of the tank battery area to document contaminate levels. Based on the results of the soil delineation investigation, it is recommended that a 1-foot thick clay cap barrier be installed to inhibit vertical migration of contaminates in soil left in place below the cap. Plains proposes to mechanically separate the rock and soil and the rock will be placed back in the excavation over the cap. The separated (impacted) soil will be sampled and analyzed for TPH and BTEX to determine if regulatory standards have been met and possibly be utilized as back fill. If the separated soil cannot meet NMOCD regulatory standards it will be transported to a certified New Mexico land farm.

QA/QC PROCEDURES

Soil Sampling

Soil samples were delivered to Environmental Lab of Texas, Inc. in Midland, Texas for BTEX and TPH. Soil samples were analyzed for BTEX and TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

Groundwater Sampling

As ground water was not encountered during the investigation process, no water samples were obtained.

Decontamination Of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox[®] detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chainof-custody form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

LIMITATIONS

Allstate Environmental Services, LLC has prepared this Preliminary Investigation Report and Remediation Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

Allstate Environmental Services, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Allstate Environmental Services, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Allstate Environmental Services, LLC has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Allstate Environmental Services, LLC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, L.P. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Allstate Environmental Services, LLC, and Plains Marketing, L.P.

FIGURE 1

SITE LOCATION MAP

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FIGURE 2

SITE MAP



Not to Scale

TABLE 1

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TABLE 1

SOIL CHEMISTRY

PLAINS MARKETING LP CHEVRON-TEXACO MONUMENT 12 LEA COUNTY, NEW MEXICO

SAMPLE	SAMPLE	MET	HOD: EPA SI	N 846-8021B,	5030	METHO	D: 8015M	
LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	GRO	DRO	TOTAL TPH
	· ·	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SB-1 5'	05/12/04	<0.025	<0.025	0.025	0.084	16.5	76.5	93.0
SB-1 15'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
SB-1,20	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	13.6	13.6
6B-1_25	05/12/04	<0.025	0.149	0.123	0.591	31	142	(173)
SB-1 35'	05/12/04	<0.025	<0.025	<0.25	0.046	<10	14.5	14.5
SB-2 20'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
SB-2 35'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
SB-3 5'	05/12/04	<0.025	<0.025	<0.025	0.086	25	278	303
SB-3 35'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
SB-4 5'	05/12/04	<0.025	0.039	0.100	0.426	46.5	196	243
SB-4 35'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	15.1	15.1
SB-5 25'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
SB-5 59'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	10.6	10.6
SB-6 5'	05/12/04	<0.025	0.026	0.061	0.284	30.9	151	182
SB-6_20'	05/12/04	<0.025	<0.025	<0.025	0.052	15.7	90	106
SB-6 25	05/12/04	<0.025	<0.025	0.081	0.373	38.4	126	164 🖊
SB-6 59'	05/12/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
SB-7 5'	05/13/04	<0.025	<0.025	<0.025	<0.025	<10	12.4	12.4
SB-7 35'	05/13/04	<0.025	<0.025	0.033	0.123	<10	42.8	42.8
SB-7 60'	05/13/04	<0.025	<0.025	<0.025	<0.025	<10	<10	<10

SOIL BORING LOGS

File	Number:	
File	Number:	

1. OWNER OF WELL

Name: Plains Pipeline, LP	Work Phone:	
Contact:	Home Phone:	
Address: 333 Clay Street, Suite 1600		
City: Houston	, State: TX	Zip: <u>77005</u>

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

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	<u>32</u> d <u>41</u> m		Longitude:	103d	18m	09s
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	_, Block No					
	Subdiv					
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H. Give State E	ngineer File Nun	ber if exis	ting well:			
	ed by (required):					

3. DRILLING CONTRACTOR

License Number:	· · · · · · · · · · · · · · · · · · ·		
Name: Straub Corporation	Work Phone: <u>432-756-3489</u>		
Agent: Edward Bryan	Home Phone:		
Mailing Address: P.O. Box 192			
City: Stanton	State: <u>TX</u> Zip: <u>79782</u>		

4. DRILLING RECORD

Drilling bcgan: 05/12/2004 ; Completed: 05/13/2004 ; Type tools: Air Rotary Drilling Rig; Size of hole: 5 in.; Total depth of well: 35 ft.; Completed well is: ________(shallow, artesian); Depth to water upon completion of well: _______ft. File Number: ______ Trn Number: ______ Form: wr-20 page 1 of 4

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5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per ft. per in. Top Bottom (feet) From To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of mud of Cement

8. PLUGGING RECORD

Plugging Contractor: §	Straub Corporation	
Address: P.O. Box 192	2, Stanton, Texas 79782	
Plugging Mcthod: Pou	ring Bentonite Holeplug	
Date Well Plugged: 05		
Plugging approved by		
	State Engineer Representative	;
No. Depth in Feet	Cubic Feet of Cement	
Top Bottom 1035	8 bags holeplug	
2		
3		
4		
5		
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File Number: _____ Trn Number: _____ Form: wr-20 page 2 of 4

File Number:	
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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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<u>50-2, Lea</u>	County,	New Mexico	/ サン
0 1	3 13	Caliche, Tan Silty Sand	
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	<u>35 14</u>		
	33 19		
			<u>*************************************</u>
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Form: wr-20 page 3 of 4

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10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best	t of his knowledge and
belief, the foregoing is a true and correct record	
hole.	
Edward Bryan	05/13/2004
Driller (mm/dd/year)	
Dimer (minuaryear)	
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FOR STATE ENGINEER USE ONLY	
Quad; FWL; FSL; Use	: Location No
File Number: Trn Number:	
Form:	wr-20 page 4 of 4

File Number:	

1. OWNER OF WELL

Name: Plains Pipeline, LP	Work Phone:	
Contact:	Home Phone:	
Address: 333 Clay Street, Suite 1600		
City: Houston	, Statc: TX	Zip: <u>77005</u>

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A1/4	_1/41/4 Sect	ion:	Township:	Range:	_ N.M.P.M.
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B. X =	feet, Y = _		feet	N.M. Coor	dinate System
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	(m), North				
	, Map No				
F. Lot No	_, Block No	of Unit	/Tract		of the
	Subdivis				
G. Other:					
	ngineer File Numb		ting well:		
	d by (required): _				

3. DRILLING CONTRACTOR

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License Number:			
Name: Straub Corporation	Work Phone: 432-756-34	89	
Agent: Edward Bryan	Home Phone:		
Mailing Address: P.O. Box 192			
City: Stanton	State: <u>TX</u> Zip: <u>79</u>	782	

4. DRILLING RECORD

Drilling began: 05/12/2004	_; Completed:	05/13/2004	; Type tools: Air Rota	ry Drilling Rig;
Size of hole: 5 in.; Total depth				
Completed well is:	(shallow,	artesian);		
Depth to water upon completion o	f well:	ft.		
File Number: 7	rn Number:	· · · · · · · · · · · · · · · · · · ·	· ·	
	Form: w	vr-20 page 1	of 4	

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per ft. per in. Top Bottom (feet) From To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of mud of Cement

8. PLUGGING RECORD

Plugging Contract	or: Straub Corporation
Address: P.O. Box	192, Stanton, Texas 79782
	Pouring Bentonite Holeplug
Date Well Plugged	1: 05/13/2004
Plugging approved	
	State Engineer Representative
No. Depth in Feet	Cubic Feet of Cement
Top Botto	m
1 0 35	8 bags holeplug

File Number: _____ Trn Number: _____

Form: wr-20 page 2 of 4

Fi	le	N	um	ber:			

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG	OF HO	DLE				
Depth in Feet Thickness		Thickness	Color and Type of Material Encountered			
From	To in f	feet	• •			
SB-3,	Lea (County, New N	<i>A</i> exico			
0	21	21	Caliche, Tan Sand, Limestone Layers			
21		14	Limestone (Hard), Tan Sand			
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File	Number:	

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best of	his knowledge and
belief, the foregoing is a true and correct record of t	uie abuve described
hole.	
Edward Bryan	<u>05/13/2004</u>
Driller (mm/dd/year)	
FOR STATE ENGINEER USE ONLY	
Quad; FWL; FSL; Use	: Location No.
File Number: Trn Number:	
Form: wr	-20 page 4 of 4

1. OWNER OF WELL

Name: Plains Pipeline, LP	Work Phone:	
Contact:	Home Phone:	
Address: 333 Clay Street, Suite 1600		
City: Houston	, State: TX	Zip: <u>77005</u>

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A	_1/4	1/4	1/4 Sect	ion:	Township:	Range:		Ι.
in					· · · · · · · · · · · · · · · · · · ·		(County.
B. X =			feet, $Y = $		fe	et, N.M. Coo	rdinate Sys	tem
	_ Zone	in the			· · · · · · · · · · · · · · · · · · ·		G	rant.
U.S.G.	S. Quad	i Map						
					Longitude:_	<u> 103</u> d _	<u>18</u> m	<u>09</u> s
D. Eas	t	(n	ı), North _		(m), UTM 2	Zone 13, NA	D_(27 or	83)
E. Tra	rt No	, Ma	ip No	of the		Hydrog	graphic Surv	/ey
F. Lot	No	, Bloc	k No	of Uni	t/Tract		of th	e
			Subdivi	sion reco	rded in		Coun	ty.
G. Oth	cr:							
H. Giv	e State	Engineer	File Num	ber if exis	sting well:			
I. On l	and own	ned by (re	equired): _					

3. DRILLING CONTRACTOR

License Number:	
Name: Straub Corporation	Work Phone: <u>432-756-3489</u>
Agent: Edward Bryan	Home Phone:
Mailing Address: P.O. Box 192	
City: Stanton	State: TX Zip: 79782

4. DRILLING RECORD

Drilling bcgan: 05/12/2004 ; Completed: 05/13/2004 ; Type tools: <u>Air Rotary Drilling Rig</u>; Size of hole: 5 in.; Total depth of well: 35 ft.; Completed well is: _______(shallow, artesian); Depth to water upon completion of well: ______ft. File Number: ______Trn Number: ______ Form: wr-20 page 1 of 4

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per ft. per in. Top Bottom (feet) From To

> ____

> > ____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of mud of Cement

> _____ _____

8. PLUGGING RECORD

Plugging Cont	tractor: S	straub Corporation	· · · · · · · · · · · · · · · · · · ·
Address: P.O.	Box 192	2. Stanton, Texas 79782	
Plugging Mctl	nod: Pou	ring Bentonite Holeplug	
Date Well Plu			
		State Engineer Representa	tive
No. Depth in I Top B	Feet	Cubic Feet of Cement	
1		8 bags holeplug	_
2			
3			
4			
5			
File Number:		Trn Number:	

Form: wr-20 page 2 of 4

File Number:	

5B #A

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

Depth i	in Feet	Thickness	Color and Type of Material Encountered
From	To in f	feet	
<u>SB-4</u> ,	Lea (County, New M	lexico
		21	Tan Silty Sand, Caliche
21	35	14	Hard Limestone, Tan Sand
	•		
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File Nu	mber: _		Trn Number:

Form: wr-20 page 3 of 4

File Number:	
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10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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······································	
The undersigned hereby certifies that, to the be	et of his knowledge and
belief, the foregoing is a true and correct recor	u of the above described
holc.	
Edward Bryan	<u>05/13/2004</u>
Driller (mm/dd/year)	
FOR STATE ENGINEER USE ONLY	
Quad; FWL; FSL; Use	
File Number: Trn Number:	
Form	n: wr-20 page 4 of 4

File Number:	
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1. OWNER OF WELL

Name: Plains Pipeline, LP	Work Phone: _	
Contact:	Home Phone:	
Address: 333 Clay Street, Suite 1600		·····
City: Houston	, State: TX	Zip: <u>77005</u>

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A1/4	_1/41/4	4 Section:	Township:	Range:	_ N.M.P.M.
in					County.
B. X =	feet,	Y =	feet	, N.M. Coor	dinate System
Zone i	n the				Grant.
U.S.G.S. Quad					
C. Latitude:					
D. East	(m), No	orth	(m), UTM Z	one 13, NAD	(27 or 83)
E. Tract No	, Map No	o of the	. <u> </u>	Hydrogr	aphic Survey
F. Lot No.					
Subdivision recorded in County.					
G. Other:					
H. Give State Engineer File Number if existing well:					
I. On land owne	d by (requir	ed):			

3. DRILLING CONTRACTOR

License Number:	
Name: Straub Corporation	Work Phone: <u>432-756-3489</u>
Agent: Edward Bryan	Home Phone:
Mailing Address: P.O. Box 192	

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

.

Drilling began: 05/12/2004 ; Completed: 05/13/2004 ; Type tools: Air Rotary Drilling Rig; Size of hole: 5 in.; Total depth of well: 60 ft.; Completed well is: (shallow, artesian); Depth to water upon completion of well: ft. File Number: Trn Number: Form: wr-20 page 1 of 4

File Number:		

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per ft. per in. Top Bottom (feet) From To

> ____

> > ____

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7. RECORD OF MUDDING AND CEMENTING

Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of mud of Cement

8. PLUGGING RECORD

Plu	Plugging Contractor: Straub Corporation			
Ad	dress: P	.O. Box 192,	Stanton, Texas 79782	
Plu	gging N	Aethod: Pour	ng Bentonite Holeplug/Cement Grout	
Dat	te Well	Plugged: 05/	13/2004	
Plu	gging a	pproved by:		
			State Engineer Representative	
No	. Depth	in Feet	Cubic Feet of Cement	
	Тор	Bottom		
1_		2	1 bag concrete	
2_	2	35	8 bags holcplug	
3	35	60	3 bags Cement grout	
4				
5				
-				

File Number: _____ Trn Number: ____

Form: wr-20 page 2 of 4

File Number:	
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9. LOG (OF H	OLE	
Depth in	Feet	Thickness	Color and Type of Material Encountered
From	To in	feet	
SB-5,	Lea	County, New Mexico	0
			—



_0	18	18	Tan Silty Sand, Caliche Limestone, Tan Silty Sand Limestone (Hard), Tan Silty Sand	
18	3 22	4	Limestone, Tan Silty Sand	
22		23	Limestone (Hard), Tan Silty Sand	
4		5	Tan Silty Sand	
5) 54	4	Tan Silty Sand	
54		6	Tan Silty Sand Tan Sand, Limestone	
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<u></u>				

File Number: _____ Trn Number: _____ Form: wr-20 page 3 of 4

File Number:	
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·····				
The undersigned hereby certifies that, to the best of	of his knowledge and			
belief, the foregoing is a true and correct record of	f the above described			
hole.				
	05/13/2004			
Edward Bryan	03/13/2004			
Driller (mm/dd/year)				
FOR STATE ENGINEER USE ONLY				
Quad; FWL; FSL; Use	: Location No:			
File Number: Trn Number:				
Form: wr-20 page 4 of 4				

1. OWNER OF WELL

Name: Plains Pipeline, LP	Work Phone: _	
Contact:	Home Phone:	
Address: 333 Clay Street, Suite 1600		
City: Houston	, State: TX	Zip: <u>77005</u>

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A1/4	_1/41/4 Sect	ion:	Township:	_ Range:	_ N.M.P.M.
in					County.
B. X =	feet, Y = _		fee	t, N.M. Coor	dinate System
Zone in	n the				Grant.
	Map				
C. Latitude:	<u>32</u> d <u>41</u> m	<u>06</u> s	Longitude:	<u> 103</u> d	<u>18</u> m <u>09</u> s
D. East	(m), North		_ (m), UTM Z	one 13, NAI	D _ (27 or 83)
E. Tract No.	, Map No	of the		Hydrog	raphic Survey
F. Lot No	_, Block No	of Unit	/Tract		of the
<u> </u>	Subdivi	sion recor	ded in		County.
G. Other:					
H. Give State Engineer File Number if existing well:					
I. On land owned by (required):					

3. DRILLING CONTRACTOR

License Number:			
Name: Straub Corporation	Work Phone: <u>432-756-3489</u>		
Agent: Edward Bryan	Home Phone:		
Mailing Address: P.O. Box 192	· · · · · · · · · · · · · · · · · · ·		
City: Stanton	State: TX Zip: 79782		

4. DRILLING RECORD

Drilling bcgan: 05/12/2004 ; Completed: 05/13/2004 ; Type tools: <u>Air Rotary Drilling Rig;</u> Size of hole: 5 in.; Total depth of well: <u>60</u> ft.; Completed well is: _______ (shallow, artesian); Depth to water upon completion of well: _______ft. File Number: ______ Trn Number: ______

Form: wr-20 page 1 of 4

_ ____

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per ft. per in. Top Bottom (feet) From To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of mud of Cement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation Address: P.O. Box 192, Stanton, Texas 79782 Plugging Method: Pouring Bentonite Holeplug/Cement Grout Date Well Plugged: 05/13/2004					
Plugging approved by:					
State Engineer Representative					
No. Depth in Feet Top Bottom	Cubic Feet of Cement				
1 2	1 bag concrete				
2 _ 2 _ 35	8 bags holeplug				
3 35 60	3 bags Cement grout				
4					
5					

File Number: _____ Trn Number: _____

Form: wr-20 page 2 of 4

9. LOG OF HOLE Depth in Feet Thickness Color and Type of Material Encountered From To in feet SB-6, Lea County, New Mexico

0	18	18	Tan Silty Sand, Caliche		
18	30	12	Limestone, Tan Sand		
30	50	20	Limestone, Tan Silty Sand		
50	60	10	Tan Silty Sand		
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FIIC IN	mnoer:				
	Form: wr-20 page 3 of 4				

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10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best of his	knowledge and
belief, the foregoing is a true and correct record of the a	above described
hole.	
Edward Bryan 0	5/13/2004
Driller (mm/dd/year)	
EOD STATE ENCINEED LISE ONLY	
FOR STATE ENGINEER USE ONLY	
Quad; FWL; FSL; Use	_; Location No
File Number: Trn Number:	
Form: wr-20	page 4 of 4
FOIIII. WI-20	page T VI T

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1. OWNER OF WELL

Name: Plains Pipeline, LP	Work Phone:	
Contact:	Home Phone:	
Address: 333 Clay Street, Suite 1600		
City: Houston	, State: TX	Zip: <u>77005</u>

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A1/4	_1/41/4 Sec	tion:	Township:	Range:	N.M.P	.M.
in						_County.
B. X =	feet, Y =		fe	et, N.M. Coo	rdinate S	ystem
Zone	n the					Grant.
	Мар					
	<u>32d 41m</u>		Longitude:	<u>103</u> d	<u>18</u> m	<u>_09</u> s
D. East	(m), North		_(m), UTM 2	Zone 13, NA	D_(27	or 83)
	, Map No					
F. Lot No.	_, Block No	of Unit	/Tract		of	the
Subdivision recorded in County.			unty.			
H. Give State E	ngineer File Nun	ber if exis	ting well:			
	d by (required):					

3. DRILLING CONTRACTOR

License Number:		
Name: Straub Corporation	Work Phone: <u>432-756-3489</u>	
Agent: Edward Bryan	Home Phone:	
Mailing Address: P.O. Box 192	·	
City: Stanton	State: TX Zip: 79782	

4. DRILLING RECORD

Drilling began: 05/13/2004	_; Completed: 05/13/2004	_; Type tools: Air Rotary Drilling Rig;
Size of hole: 5 in.; Total depth	n of well: <u>60</u> ft.;	
Completed well is:	(shallow, artesian);	
Depth to water upon completion of	of well: ft.	
File Number:	Trn Number:	Mar dana
	Form: wr-20 page 1	of 4

File Number: _____

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per ft. per in. Top Bottom (feet) From To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of mud of Cement

8. PLUGGING RECORD

Plugging Contractor: St	raub Corporation	
Address: P.O. Box 192,	Stanton, Texas 79782	
Plugging Mcthod: Pouri	ing Bentonite Holeplug/Cement Grout	
Date Well Plugged: 05/1	13/2004	
Plugging approved by:		
	State Engineer Representative	
No. Depth in Feet	Cubic Feet of Cement	
Top Bottom		
12	1 bag concrete	

_____ _____

2	35	8 bags holeplug
3 35	60	3 bags Cement grout
4		
5		

File Number: _____ Trn Number: ____

Form: wr-20 page 2 of 4
NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

 Depth in Feet
 Thickness
 O

 From
 To in feet
 SB-7,
 Lea
 County, New Mexico

 Color and Type of Material Encountered

¥

0	20	20	Tan Silty Sand, Caliche
20	31	11	Tan Silty Sand, Caliche Limestone, Tan Sand, Caliche
31	42	11	Limestone . Tan Silty Sand
42	49	7	Tan Silty Sand, Limestone Layers
49	60	11	Tan Silty Sand, Limestone Layers Tan Silty Sand, Limestone Layers
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Form: wr-20 page 3 of 4

File	Number:					

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby c	ertifies that, to the best o	f his knowledge and		
belief, the foregoing is a t				
hole.				
		05/12/2004		
	· · · · · · · · · · · · ·	05/13/2004		
Driller (mm/dd/year)				
FOR STATE ENGINEER				
Quad; FWL	; FSL; Use	; Location No		
File Number:	Trn Number:			
		00 4 6 4		

Form: wr-20 page 4 of 4

ANALYTICAL RESULTS

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Analytical Report

Prepared for:

Kcn Dutton Allstate Environmental Services, LLC P.O. Box 11322 Midland, TX 79702

> Project: PAA MNT 12 Project Number: [none] Location: Lea County, NM

Lab Order Number: 4E13005

Report Date: 05/17/04

P.O. Box 11322 Midland TX, 79702	Project Number: [none] Project Manager: Ken Dutton			Reported: 05/17/04 13:46
	ANALYTICAL REPORT FOR SAM	PLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 5'	4E13005-01	Soil	05/12/04 11:29	05/13/04 15:00
SB-1 15'	4E13005-02	Soil	05/12/04 11:35	05/13/04 15:00
SB-1 20'	4E13005-03	Soil	05/12/04 11:42	05/13/04 15:00
SB-1 25'	4E13005-04	Soil	05/12/04 11:55	05/13/04 15:00
SB-1 35'	4E13005-05	Soil	05/12/04 12:15	05/13/04 15:00
SB-2 20'	4E13005-06	Soil	05/12/04 13:27	05/13/04 15:00
SB-2 35'	4E13005-07	Soil	05/12/04 13:59	05/13/04 15:00
SB-3 5'	4E13005-08	Soil	05/12/04 14:45	05/13/04 15:00
SB-3 35'	4E13005-09	Soil	05/12/04 15:19	05/13/04 15:00
SB-4 5'	4E13005-10	Soil	05/12/04 15:30	05/13/04 15:00
SB-4 35'	4E13005-11	Soil	05/12/04 16:12	05/13/04 15:00
SB-5 25'	4E13005-12	Soil	05/12/04 16:45	05/13/04 15:00
SB-5 59'	4E13005-13	Soil	05/12/04 17:45	05/13/04 15:00
SB-6 5'	4E13005-14	Soil	05/12/04 18:12	05/13/04 15:00
SB-6 20'	4E13005-15	Soil	05/12/04 18:22	05/13/04 15:00
SB-6 59'	4E13005-16	Soil	05/12/04 19:17	05/13/04 15:00
SB-7 5'	4E13005-17	Soil	05/13/04 07:42	05/13/04 15:00
SB-7 35'	4E13005-18	Soil	05/13/04 08:29	05/13/04 15:00
SB-7 60'	4E13005-19	Soil	05/13/04 09:13	05/13/04 15:00
SB-6 25	4E13005-20	Soil	05/12/04 18:31	05/13/04 15:00

Project: PAA MNT 12

Allstate Environmental Services, LLC

Fax: (432) 397-5125

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 5' (4E13005-01) Soil								· · · · · · · · · · · · · · · · · · ·	J
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/13/04	EPA 8021B	
Toluene	ND	0.0250	•	٩		u	4	*	
Ethylbenzene	0.0252	0.0250		۳	-	*	"	*	
Xylene (p/m)	0.0846	0.0250	"	n		n	*	-	
Xylene (0)	J [0.0214]	0.0250	"			**	"	n	1
Surrogate: a,a,a-Trifluorotoluene		90.0 %	80-	120	,	*	,	n	
Surrogate: 4-Bromofluorobenzene		93.1 %	80-1	120	n	"	п	n	
Gasoline Range Organics C6-C12	16.5	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesei Range Organics >C12-C35	76.5	10.0	Ħ	**				-	
Total Hydrocarbon C6-C35	93.0	10.0	۳	"	•	"		11	
Surrogate: 1-Chlorooctane	· · · · · · · · · · · · · · · · · · ·	105 %	70-1	130	, , , , , , , , , , , , , , , , , , , ,	n –	n	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Surrogate: 1-Chlorooctadecane		120 %	70 -1	130	0	*	*	n	
SB-1 15' (4E13005-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/13/04	EPA 8021B	
Toluene	ND	0.0250		н	u	u	*	"	
Ethylbenzene	ND	0.0250	"	•		u		•	
Xylene (p/m)	ND	0.0250	n	*	*	n	n	π	
Xylene (o)	ND	0.0250	*	•	н	n	-	*	
Surrogate: a,a,a-Trifluorotoluene	· · · · · · · · · · · · · · · · · · ·	92.8 %	80	120	#	"	n	*	· · · · · ·
Surrogate: 4-Bromofluorobenzene		92.5 %	80-	120	а	"	"	P	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04		EPA 8015M	
Diesel Range Organics >C12-C35	J [9.38]	10.0	•	"	•	15	*		J
Total Hydrocarbon C6-C35	ND	10.0	*	*	86	8	"		
Surrogate: 1-Chlorooctane		107 %	70-1	130	*	"	17	*	
Surrogate: 1-Chlorooctadecane		119 %	70-1	130			"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written appraval of Environmental Lab of Texas.

Quality Assurance Review

Page 2 of 20

Project: PAA MNT 12 Project Number: [none] Project Manager: Ken Dutton

Organics by GC

Environmental Lab of Texas

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 20' (4E13005-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250		۳	n	u			
Ethylbenzene	ND	0.0250		-	**			*	
Xylene (p/m)	ND	0.0250		"	н	"	ti	*	
Xylene (0)	ND	0.0250	Ħ	"					
Surrogate: a,a,a-Trifluorotoluene	· · · · · · · · · · · · · · · · · · ·	99.5 %	80-1	120	"	*	"	t)	
Surrogate: 4-Bromofluorobenzene		89.4 %	80-1	20	n	"	п	n	
Gasoline Range Organics C6-C12	J [5.81]	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	J
Diesel Range Organics >C12-C35	13.6	10.0	۳		•	•	•		
Total Hydrocarbon C6-C35	13.6	10.0			-		*	*	
Surrogate: 1-Chlorooctane		93.8 %	70-1	30	N	n	#	tr	
Surrogate: I-Chlorooctadecane		100 %	70-1	130	ı	"	n	"	
SB-1 25' (4E13005-04) Soil									
Benzene	J [0.0148]	0.0250	mg/kg dry	25	EE41305	05/13/04	05/13/04	EPA 8021B	
Toluene	0.149	0.0250			-		n		
Ethylbenzene	0.123	0.0250	"			"	"		
Xylene (p/m)	9.475	0.0250	n	*			'n	n	
Xylene (o)	0.116	0.0250			*	۳	n		
Surrogate: a,a,a-Trifluorotoluene		98.9 %	80-1	120	41	"	п	*	
Surrogate: 4-Bromofluorobenzene		99.4 %	80-1	20	"	"	n		
Gasoline Range Organics C6-C12	31.0	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	142	10.0			•	•	n		
Total Hydrocarbon C6-C35	173	10.0	۳	*	u	n	19		
Surrogate: 1-Chlorooctane		96.6 %	70-1	30	н	N	#	#	
Surrogate: 1-Chlorooctadecane		113 %	70-1	30	a	*		*	

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Project: PAA MNT 12 Project Number: [none] Project Manager: Ken Dutton

Organics by GC

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 35' (4E13005-05) Soil	······································	·····							
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	a	"	"	4		"	
Ethylbenzene	J [0.0220]	0.0250	۳		•	"			
Xylene (p/m)	0.0462	0.0250	"	•	-		"		
Xylene (o)	ND	0.0250	"	*				*	
Surrogate: a,a,a-Trifluorotoluene		92.5 %	80-1	120	R		17	17	
Surrogate: 4-Bromofluorobenzene		90.8 %	80-1	120	Ħ	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	14.5	10.0	*	Ħ		It	*	n	
Total Hydrocarbon C6-C35	14.5	10.0		"	-	н	"		
Surrogate: 1-Chlorooctane		94.6 %	70-1	130	"	n	n	ť	
Surrogate: 1-Chlorooctadecane		110 %	70- .	130			n	29	
SB-2 20' (4E13005-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/13/04	EPA 8021B	
Tolucne	ND	0.0250	Ħ	•		"		-	
Ethylbenzene	ND	0.0250	*				*	•	
Xylene (p/m)	ND	0.0250	"	19		"	*	*	
Xylene (o)	ND	0.0250	n	4	н	**	65	*	,
Surrogate: a,a,a-Trifluorotoluene		90.7 %	80	120	*	n	#	n	
Surrogate: 4-Bromofluorobenzene		94.0 %	80-1	120	"	*	n	*	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	•	п		**	n	۳	
Total Hydrocarbon C6-C35	ND	10.0		4	"	u		n	
Surrogate: 1-Chlorooctane	······································	127 %	70-,	130	"	"	η	n	
Surrogate: I-Chlorovctadecane		129 %	70	130	~	"	-	7	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-2 35' (4E13005-07) Soil	······································	<u></u>							
Benzene	NĎ	0.0250	mg/kg dry	25	EE41305	05/13/04	05/13/04	EPA 8021B	
Toluene	ND	0.0250	"	*		"	n	n	
Ethylbenzene	ND	0.0250	"	•	•				
Xylene (p/m)	ND	0.0250	n	u	u	"	15	**	
Xylene (o)	ND	0.0250		۳	u		*		
Surrogate: a,a,a-Trifluorotoluene		92.9 %	80-1	120	"	n	77	by	
Surrogate: 4-Bromofluorobenzene		90.3 %	80-1	120	P	"	*	83	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	*		•	۳	n	-	
Total Hydrocarbon C6-C35	ND	10.0	Ħ	•		"	"		
Surrogate: 1-Chlorooctane		97.4 %	70-1	130	Ħ	77	п	n	
Surrogate: 1-Chlorooctadecane		113 %	70-1	130	n	n	n	n	
SB-3 5' (4E13005-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/13/04	EPA 8021B	
Toluene	J [0.0155]	0.0250	"			*		в	ſ
Ethylbenzene	J [0.0244]	0.0250	"	"		*			J
Xylene (p/m)	0.0863	0.0250	*	"			n	•	
Xylene (o)	J [0.0223]	0.0250		۳	•	n	*	"	J
Surrogate: a,a,a-Trifluorotoluene		91.6%	80-1	120	n	#	π	*	<u> </u>
Surrogate: 4-Bromofluorobenzene		91.9 %	80-1	120	"		"	h	
Gasoline Range Organics C6-C12	25.0	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	278	10.0	"	"	• .	•	-	-	
Total Hydrocarbon C6-C35	303	10.0				•	*	*	
Surrogate: 1-Chlorooctane		103 %	70-1	130	"	"		ņ	
Surrogate: 1-Chlorooctadecane		!16%	70-1	130	"	"			

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-3 35' (4E13005-09) Soil	······································	·····	·····	,, , ,				····	
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	*	•	"	н			
Ethylbenzene	ND	0.0250				*		*	
Xylene (p/m)	ND	0.0250	4	n	u	"	n	*	
Xylene (o)	ND	0.0250		4	•	n			
Surrogate: a,a,a-Trifluorotoluene	· · · · · · · · · · · · · · · · · · ·	93.0 %	80-1	20	"	"	п	n	
Surrogate: 4-Bromofluorobenzene		95.2 %	80-1	20	"	"	•	**	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	ı	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [7.40]	10.0	**	•	-	•		**	1
Total Hydrocarbon C6-C35	ND	10.0	"	•	•	u	-		
Surrogate: 1-Chlorooctane		102 %	70-1	30	n	77	π	77	
Surrogate: 1-Chlorooctadecane		114%	70-1	30	v	"	-	•	
SB-4 5' (4E13005-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	0.0394	0.0250					*	Π	
Ethylbenzene	0.100	0.0250		*			n		
Xylene (p/m)	0.347	0.0250	*	н			*	*	
Xylene (o)	0.0795	0.0250	n			n	π	Π	
Surrogate: a,a,a-Trifluorotoluene		100%	80-1	20	n	"		n	
Surrogate: 4-Bromofluorobenzene		91.0%	80-1	20		"	n	<i>n</i>	
Gasoline Range Organics C6-C12	46.5	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	196	10.0		-	•	n			
Total Hydrocarbon C6-C35	243	10.0		"	•		*	-	
Surrogate: 1-Chiorooctane		109 %	70-1	30	н	"	n	я	
Surrogate: 1-Chlorooctadecane		117%	70-1	30		"	"		

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-4 35' (4E13005-11) Soil	·····								
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	n	۳		u	*	*	
Ethylbenzene	ND	0.0250	*	۳			•	*	
Xylene (p/m)	ND	0.0250	"	n	"	"	π		
Xylene (o)	ND	0.0250	۳	Ħ	4	51	•	-	
Surrogate: a,a,a-Trifluorotoluene	···· · · · · · · · · · · · · · · · · ·	89.1 %	80-1	20	"	"	n	n	
Surrogate: 4-Bromofluorobenzene		94.3 %	80-1	(20	"	"		•	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	ł	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	15.1	10.0	м			M	-	9	
Total Hydrocarbon C6-C35	15.1	10.0	n	*	•	a	-	W	
Surrogate: I-Chlorooctane		102 %	70-1	30	*	7	M	"	
Surrogate: 1-Chlorooctadecane		118 %	70-1	130	"	"	"	"	
SB-5 25' (4E13005-12) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	"	"		u			
Ethylbenzene	J [0.0126]	0.0250	*	**	•		*	17	J
Xylene (p/m)	ND	0.0250	Ħ		•		*	7	
Xylene (o)	ND	0.0250	n	Ħ		"	n		
Surrogate: a,a,a-Trifluorotoluene		98.3 %	80-1	120	n	н	n		
Surrogate: 4-Bromofluorobenzene		94.4 %	80-1	20	"	n	п	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04	05/13/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [9.34]	10.0	"	"		14	*	Π	1
Total Hydrocarbon C6-C35	J [9.34]	10.0	"	=	•	18	"	11	I
Surrogate: 1-Chlorooctane		99.6 %	70-1	30	"	"	n	#	
Surrogate: 1-Chlorooctadecane		114 %	70-1	130	"	"	n	п	

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Project Number: [none] Project Manager: Ken Dutton

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		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-5 59' (4E13005-13) Soil			<u></u>						
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	*	•		u	"	*	
Ethylbenzene	ND	0.0250	*			"	*	*	
Xylene (p/m)	ND	0.0250	"		и	"			
Xylene (o)	ND	0.0250		•	n		*		
Surrogate: a,a,a-Trifluorotoluene		87.5 %	80-1	20	"	n	"	TP	
Surrogate: 4-Bromofluorobenzene		88.1 %	80-1	20	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	10.6	10.0		-	•	*		*	
Total Hydrocarbon C6-C35	10.6	10.0	"		-	"	"		
Surrogate: 1-Chlorovctane		98.2 %	70-1	30	0	"	N	Ħ	
Surrogate: 1-Chlorooctadecane		106 %	70-1	30	**	"	"	n	
SB-6 5' (4E13005-14) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	0.0263	0.0250	"	"			n	*	
Ethylbenzene	0.0614	0.0250	*	۳	•	N	•		
Xylene (p/m)	0.217	0.0250			•	н	"		
Xylene (o)	0.0677	0.0250	n	*	-	n	ħ		
Surrogate: a,a,a-Trifluorotoluene		88.2 %	80-1	20	"	π	п	<i>n</i>	
Surrogate: 4-Bromofluorobenzene		95.0 %	80-1	20	n	n		n	
Gasoline Range Organics C6-C12	30.9	10.0	mg/kg dry	1	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	151	10.0	۳	*	•	"		**	
Total Hydrocarbon C6-C35	182	10.0	۳		•	"	*		
Surrogate: 1-Chlorooctane		108 %	70-1	30	"	*		n	
Surrogate: 1-Chlorooctadecane		116%	70-1	30		"	н	n	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Anatyzed	Method	Notes
SB-6 20' (4E13005-15) Soil			,						
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	"		P	н			
Ethylbenzene	J [0.0206]	0.0250	π	а	-			,,	ſ
Xylene (p/m)	0.0521	0.0250	-	н		"			
Xylene (o)	ND	0.0250	"			"	"		
Surrogate: a,a,a-Trifluorotoluene		92.7 %	80-1	20	17	n	7	77	
Surrogate: 4-Bromofluorobenzene		97.4 %	80-1	20	*	"	"	*	
Gasoline Range Organics C6-C12	15.7	10.0	mg/kg dry	i	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	90.0	10.0		"		*			
Total Hydrocarbon C6-C35	106	10.0					n	"	
Surrogate: 1-Chlorooctane		104 %	70-1	30	n	W	v	19	
Surrogate: 1-Chlorooctadecane		114 %	70-1	30	"	"	"	n	
SB-6 59' (4E13005-16) Soil	·								
Benzene	ND	0.0250	mg/kg dry	25	EE41305	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	Ħ	4	"	W	•		
Ethylbenzene	ND	0.0250		*	н	**	•		
Xylene (p/m)	ND	0.0250	*		11	н		• •	
Xylene (o)	ND	0.0250	"		н	"	n	-	
Surrogate: a,a,a-Trifluorotoluene	AND AND U. I. A . I.	91.8 %	80-1	20	0	7	"		
Surrogate: 4-Bromofluorobenzene		94.2 %	80-1	20	n	"		t.	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesei Range Organics >C12-C35	J [9.76]	10.0	n	•			۳	-	1
Total Hydrocarbon C6-C35	ND	10.0	n	*	**	"	"		
Surrogate: 1-Chlorooctane		98.0 %	70-1	30	#	7		<i>n</i>	
Surrogate: 1-Chlorooctadecane		106 %	70-1	30	*	"			

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Project Number: [none] Project Manager: Ken Dutton

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Organics by GC

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-7 5' (4E13005-17) Soil								· · · · · · · · · · · ·	
Benzene	ND	0.0250	mg/kg dry	25	EE41401	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250	п	n	n	a		41	
Ethylbenzene	ND	0.0250	"	۳	"		•		
Xylene (p/m)	ND	0.0250	m	u	n	8	u	n	
Xylene (0)	ND	0.0250		"		"	w		
Surrogate: a,a,a-Trifluorotoluene		91.5 %	80-1	120	<i>p</i>	n	D		
Surrogate: 4-Bromofluorobenzene		90.6 %	80-1	20	4		n	Ħ	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	I	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	12.4	10.0		*	•	"	*	n	
Total Hydrocarbon C6-C35	12.4	10.0	-	"	•	•	"	*	
Surrogate: 1-Chlorooctane		89.6 %	70-1	30	"	#	<i>n</i>	7	
Surrogate: 1-Chlorooctadecane		99.4 %	70-1	30	n	*	n	"	
SB-7 35' (4E13005-18) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41401	05/13/04	05/14/04	EPA 8021B	
Toluene	J [0.0128]	0.0250	"				*		I
Ethylbenzene	0.0337	0.0250	•	-	-		**		
Xylene (p/m)	0.0950	0.0250	ĸ	-	•		n	n	
Xylene (0)	0.0281	0.0250	-	•		•	*		
Surrogate: a,a,a-Trifluorotoluene		95.1 %	80-1	20	11	n	n	5	
Surrogate: 4-Bromofluorobenzene		94.6 %	80-1	20		n	π	n	
Gasoline Range Organics C6-C12	J [7.09]	10.0	mg/kg dry	1	EE41308	05/13/04	05/14/04	EPA 8015M	J
Diesel Range Organics >C12-C35	42.8	10.0				n	•		
Total Hydrocarbon C6-C35	42.8	10.0	n	n	•	n		n	
Surrogate: 1-Chlorooctane		94.4 %	70-1	30	n	"	*	"	
Surrogate: 1-Chlorooctadecane		108 %	70-1	30	*	-	m	*	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-7 60' (4E13005-19) Soil					Daich				Notes
Benzene	ND	0.0250	mg/kg dry	25	EE41401	05/13/04	05/14/04	EPA 8021B	
Toluene	ND	0.0250		*1					
Ethylbenzene	ND	0.0250			•				
Xylene (p/m)	ND	0.0250		*1		u	н		
Xylene (0)	ND	0.0250	"	*	11	u	*	10	
Surrogate: a,a,a-Trifluorotoluene		82.9 %	80-1	20	н		n	<i>n</i>	
Surrogate: 4-Bromofluorobenzene		83.7%	80-1	20		,	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1 ·	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [7.52]	10.0	"		-	•	n	'n	3
Total Hydrocarbon C6-C35	ND	10.0	n	٦	•	n	n	•	
Surrogate: 1-Chlorooctane		102 %	70-1	30	n	,	,		
Surrogate: I-Chlorooctadecane		107%	70-1	130		~	*		
SB-6 25' (4E13005-20) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE41401	05/13/04	05/14/04	EPA 8021B	
Toluene	J [0.0243]	0.0250	-		•	"	*		ſ
Ethylbenzene	0.0817	0.0250		+		-	*	n	
Xylene (p/m)	0.285	0.0250	۳	H	•		"	n	
Xylene (o)	0.0883	0.0250		"		u	п		
Surrogate: a,a,a-Trifluorotoluene		81.7%	80-1	120	u	p	n	ti	
Surrogate: 4-Bromofluorobenzene		90.0 %	80-1	120	"	n	,	N	
Gasoline Range Organics C6-C12	38.4	10.0	mg/kg dry	1	EE41308	05/13/04	05/14/04	EPA 8015M	
Diesel Range Organics >C12-C35	126	10.0	۳	n	-	п	"	*	
Total Hydrocarbon C6-C35	164	10.0	-	*			"	-	
Surrogate: 1-Chlorooctane		102 %	70-1	130		"	8	77	
Surrogate: I-Chlorooctadecane		113%	70-1	130	"	"	"		

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General Chemistry Parameters by EPA / Standard Methods

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		Reporting						·····	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 5' (4E13005-01) Soil									
% Solids	97.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-1 15' (4E13005-02) Soil									
% Solids	95.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-1 20' (4E13005-03) Soil									
% Solids	94.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-1 25' (4E13005-04) Soil	·····							·······	
% Solids	99.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-1 35' (4E13005-05) Soil									
% Solids	99.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-2 20' (4E13005-06) Soil							·····		
% Solids	96.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-2 35' (4E13005-07) Soll									
% Solids	99.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-3 5' (4E13005-08) Soil									
% Solids	96.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-3 35' (4E13005-09) Soil									
% Solids	98.0		%	1	EE41402	05/13/04	05/14/04	% calculation	

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte Result Limit Units Dilution Batch Prepared Analyzed SB-4 5' (4E13005-10) Soil 95.0 % 1 EE41402 05/13/04 05/14/04 9 SB-4 35' (4E13005-11) Soil 97.0 % 1 EE41402 05/13/04 05/14/04 9 SB-5 55' (4E13005-12) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-5 55' (4E13005-13) Soil 9 9 1 EE41402 05/13/04 05/14/04 9 SB-5 55' (4E13005-14) Soil 9 9 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4E13005-14) Soil 9 9 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4E13005-15) Soil 9 9 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil 9 9 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil 9 9	· · · · · · · · · · · · · · · · · · ·										·····
% Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9 SB-4 35' (4E13005-11) Soli % 1 EE41402 05/13/04 05/14/04 9 % Solids 97.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 97.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 91.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 94.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9	yzed Method	Notes	Method	Analyzed	Prepared	Batch	Dilution	Units	Reporting Limit	Result	Analyte
SB-4 35° (4E13005-11) Soll % Solids 97.0 % 1 EE41402 05/13/04 05/14/04 % SB-5 15° (4E13005-12) Soll ** 1 EE41402 05/13/04 05/14/04 % % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 91.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 91.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 91.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 94.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 % % Solids 97.0 % 1 EE41402 05/1							<u> </u>				SB-4 5' (4E13005-10) Soil
% Solids 97.0 % 1 EE41402 05/13/04 05/14/04 9 SB-5 25' (4E13005-12) Soli 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-5 59' (4E13005-13) Soli 91.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4E13005-14) Soli 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 20' (4E13005-15) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil 9 9 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E13005-17) Soil 9 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9	4/04 % calculation		% calculation	05/14/04	05/13/04	EE41402	1	%		95.0	% Solids
SB-5 25' (4E13005-12) Soll % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-5 59' (4É13005-13) Soll 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4É13005-14) Soil 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4É13005-14) Soil 94.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4É13005-15) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4É13005-16) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4É13005-16) Soil 9 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4É13005-17) Soil 9 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9											SB-4 35' (4E13005-11) Soll
% Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-5 59' (4E13005-13) Soli 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4E13005-14) Soli 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4E13005-14) Soli 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 20' (4E13005-15) Soli 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soli 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soli 9 9 9 9 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E13005-17) Soli 9 9 9 9 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9	1/04 % calculation	i	% calculation	05/14/04	05/13/04	EE41402	1	%		97.0	% Solids
SB-5 59' (4Ê13005-13) Soli % Solids 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4Ê13005-14) Soli 94.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 50' (4Ê13005-15) Soli 9 9 9 9 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4Ê13005-16) Soli 9 9 9 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4Ê13005-16) Soli 9 9 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4Ê13005-16) Soli 9 1 EE41402 05/13/04 05/14/04 9 % Solids 87.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9											SB-5 25' (4E13005-12) Soil
% Solids 91.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 5' (4E13005-14) Soli 94.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 20' (4E13005-15) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil 9 1 EE41402 05/13/04 05/14/04 9 % Solids 87.0 % 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9	4/04 % calculation		% calculation	05/14/04	05/13/04	EE41402	1	%		96.0	% Solids
SB-6 5' (4E13005-14) Soil % Solids 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 20' (4E13005-15) Soil								-			SB-5 59' (4E13005-13) Soil
% Solids 94.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 20' (4E13005-15) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil 9 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E13005-17) Soil 95.0 % 1 EE41402 05/13/04 05/14/04 9	1/04 % calculation	i	% calculation	05/14/04	05/13/04	EE41402	1	%		91.0	% Solids
SB-6 20' (4E 13005-15) Soil 96.0 % 1 EE41402 05/13/04 05/14/04 9 '% Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E 13005-16) Soil * * 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E 13005-17) Soil * * 1 EE41402 05/13/04 05/14/04 9 '% Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9									.		SB-6 5' (4E13005-14) Soil
% Solids 96.0 % 1 EE41402 05/13/04 05/14/04 9 SB-6 59' (4E13005-16) Soil % 1 EE41402 05/13/04 05/14/04 9 % Solids 87.0 % 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E13005-17) Soil % 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9	1/04 % calculation	ı	% calculation	05/14/04	05/13/04	EE41402	1	%		94.0	% Solids
SB-6 59' (4E13005-16) Soil % Solids 87.0 % Solids 87.0 % Solids 95.0 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E13005-17) Soil	`										SB-6 20' (4E13005-15) Soil
% Solids 87.0 % 1 EE41402 05/13/04 05/14/04 9 SB-7 5' (4E13005-17) Soil % 1 EE41402 05/13/04 05/14/04 9 % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9	1/04 % calculation	1	% calculation	05/14/04	05/13/04	EE41402	1	%		96.0	% Solids
SB-7 5' (4E13005-17) Soil % Solids 95.0 % 1 EE41402 05/13/04 05/14/04 %											SB-6 59' (4E13005-16) Soil
% Solids 95.0 % 1 EE41402 05/13/04 05/14/04 9	4/04 % calculation	1	% calculation	05/14/04	05/13/04	EE41402	1	%		87.0	% Solids
	·		<u></u>								SB-7 5' (4E13005-17) Soil
SB-7 35' (4E13905-18) Soil	1/04 % calculation	1	% calculation	05/14/04	05/13/04	EE41402	1	%		95.0	% Solids
											SB-7 35' (4E13005-18) Soil
% Solids 99.0 % 1 EE41402 05/13/04 05/14/04 %	1/04 % calculation	i	% calculation	05/14/04	05/13/04	EE41402	1	%		99.0	% Solids

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General Chemistry Parameters by EPA / Standard Methods

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-7 60' (4E13005-19) Soil									
% Solids	90.0		%	1	EE41402	05/13/04	05/14/04	% calculation	
SB-6 25' (4E13005-20) Soil							•		
% Solids	98.0		%	1	EE41402	05/13/04	05/14/04	% calculation	· · · · · · · · · · · · · · · · · · ·

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Organics by GC - Quality Control

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		Reporting		Spike	Source		%REC		RPD	
Analytc	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE41305 - EPA 5030C (GC)										
Blank (EE41305-BLK1)				Prepared &	Analyzed:	05/13/04				
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	•							
Ethylbenzene	ND	0.00100	61							
Xylene (p/m)	ND	0.00100	Ħ							
Xylene (o)	ND	0.00100	-							
Surrogate: a,a,a-Trifluorotoluene	105		ug/kg	100		105	80-120			
Surrogate: 4-Bromofluorobenzene	81.3		п	100		81.3	80-120			
LCS (EE41305-BS1)				Prepared &	: Analyzed:	05/13/04				
Benzene	102		ug/kg	100		102	80-120		<u> </u>	
Toluenc	96.3			100		96.3	80-120			
Ethylbenzene	94.9			100	-	94.9	80-120			
Xylene (p/m)	183		"	200		91.5	80-120			
Xylene (o)	90.8		"	100		90.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	105		n	100		105	80-120			
Surrogate: 4-Bromofluorobenzene	84.6		P	100		84.6	80-120			
Calibration Check (EE41305-CCV1)				Prepared; (5/13/04 A	nalyzcd: 05	/14/04			
Benzene	101	······································	ug/kg	100		101	80-120			
Toluene	98.8		a	100		98.8	80-120			
Ethylbenzene	96.5		-	100		96.5	80-120			
Xylene (p/m)	190			200		95.0	80-120			
Xylene (0)	96.6			100		96.6	80-120			
Surrogate: a,a,a-Triftuorototuene	93.8		N	100		93.8	80-120		· · · · · · · · · · · · · · · · · · ·	
Surrogate: 4-Bromofluorobenzene	93.5		u	100		93.5	80-120			
Matrix Spike (EE41305-MS1)	Sou	irce: 4E13005	-05	Prepared: ()5/13/04 A	nalyzed: 05	/14/04			
Benzene	2510		ug/kg	2500	ND	100	80-120			
Toluene	2440		*	2500	ND	97.6	80-120			
Ethylbenzene	2440		•	2500	21.8	96.7	80-120			
Xylene (p/m)	4790		-	5000	45.7	94.9	80-120			
Xylene (o)	2370		-	2500	ND	94.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	100		#	100		100	80-120			
Surrogate: 4-Bromofluorobenzene	99.2		H	100		99.2	80-120			

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Organics by GC - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE41305 - EPA 5030C (GC)						<u></u>				
Matrix Spike Dup (EE41305-MSD1)	Sour	ce: 4E13005-	05	Prepared: 0)5/13/04 A	nalyzed: 05	/14/04			
Benzene	2440		ug/kg	2500	ND	97.6	80-120	2.43	20	
Tolucne	2410		•	2500	ND	96.4	80-120	1.24	20	
Ethylbenzene	2410		-	2500	21.8	95.5	80-120	1.25	20	
Xylene (p/m)	4740			5000	45.7	93.9	80-120	1.06	20	

.

8

2500

100

100

ND

92.8

91.0

89.0

80-120

80-120

80-120

2.13

20

2320

91.0

89.0

Ratch FF41308 - Solvent Extraction (GC)

Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

Xylene (o)

Blank (EE41308-BLK1)				Prepared & Anal	yzed: 05/13/04		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet	<u> </u>		· · · · · · · · · · · · · · · · · · ·	
Diesel Range Organics >C12-C35	ND	10.0					
Total Hydrocarbon C6-C35	ND	1 0 .0	•				
Surrogate: 1-Chlorooctane	36.9		mg/kg	50.0	73.8	70-130	
Surrogate: 1-Chlorooctadecane	43.4		9	50.0	86.8	70-130	
LCS (EE41308-BS1)				Prepared & Anai	yzed: 05/13/04		
Gasoline Range Organics C6-C12	424	10.0	mg/kg wet	500	84.8	75-125	
Diesel Range Organics >C12-C35	513	10.0	•	500	103	75-125	
Total Hydrocarbon C6-C35	937	10.0	•	1000	93.7	75-125	
Surrogate: 1-Chloroociane	52.6		mg/kg	50.0	105	70-130	
Surrogate: 1-Chlorooctadecane	44.2		*	50.0	88.4	70-130	
Calibration Check (EE41308-CCV1)				Prepared & Anal	yzed: 05/13/04		
Gasolinc Range Organics C6-C12	463		mg/kg	500	92.6	80-120	•
Diesel Range Organics >C12-C35	528		•	500	106	80-120	
Total Hydrocarbon C6-C35	991			1000	99.1	80-120	
Surrogate: 1-Chlorooctane	52.6			50.0	105	70-130	
Surrogate: 1-Chlorooctadecane	54.6			50.0	109	70-130	

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Organics by GC - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE41308 - Solvent Extraction (GC)									·	
Matrix Spike (EE41308-MS1)	Sou	rce: 4E13005	⊷ 0 7	Prepared &	z Analyzed:	05/13/04				
Gasoline Range Organics C6-C12	499	10.0	mg/kg dry	505	ND	98.8	75-125			
Diesel Range Organics >C12-C35	561	10.0	•	505	ND	111	75-125			
Total Hydrocarbon C6-C35	1060	10.0	•	1010	ND	105	75-125			
Surrogate: 1-Chlorooctane	53.3		mg/kg	50.0		107	70-130		· · · · · · · · · · · · · · · · · · ·	
Surrogate: 1-Chlorooctadecane	56.2		N	50.0		112	70-130			
Matrix Spike Dup (EE41308-MSD1)	Son	rce: 4E13005	-07	Prepared &	z Analyzed:	05/13/04				
Gasoline Range Organics C6-C12	507	10.0	mg/kg dry	505	ND	100	75-125	1.59	20	
Diesel Range Organics >C12-C35	579	10.0		505	ND	115	75-125	3.16	20	
Total Hydrocarbon C6-C35	1090	10.0	-	1010	ND	108	75-125	2.79	20	
Surrogate: 1-Chlorooctane	53.4		mg/kg	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	55.4		"	50.0		m	70-130			
Batch EE41401 - EPA 5030C (GC)										
Blank (EE41401-BLK1)				Prepared: (05/13/04 A	nalyzed: 05	/14/04			
Benzene	ND	0.0250	mg/kg wet							
Tohuene	ND	0.0250								
Ethylbenzene	ND	0.0250	•							
Xylene (p/m)	ND	0.0250								
Xylene (o)	ND	0.0250								
Surrogate: a,a,a-Trifluorotoluene	86.9	·	ug/kg	100	• • • • • • •	86.9	80-120			
Surrogate: 4-Bromofluorobenzene	88.9		*	100		88.9	80-120			

LCS (EE41401-BS1)			Prepared: 05/13/	04 Analyzed: 05	5/14/04
Benzene	90.3	ug/kg	100	90.3	80-120
Toluene	88.7		100	88.7	80-120
Ethylbenzene	88.2	. 4	100	88.2	80-120
Xylene (p/m)	173	•	200	86.5	80-120
Xylene (o)	87.7	•	100	87.7	80-120
Surrogate: a,a,a-Trifluorotoluene	83.2	Ri Eliterativo	100	83.2	80-120
Surrogate: 4-Bromofluorobenzene	90.8		100	90.8	80-120

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Organics by GC - Quality Control

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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE41401 - EPA 5030C (GC)										
Calibration Check (EE41401-CCV1)				Prepared: ()5/13/04 A	nalyzed: 05	/14/04			
Benzene	101		ug/kg	100		101	80-120			
Tolucne	98.8		•	100		98.8	80-120			
Ethylbenzene	96.5		-	100		96.5	80-120			
Xylene (p/m)	190		•	200		95.0	80-120			
Xylene (o)	96.6		•.	100		96.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	93.8		M	100		93.8	80-120			
Surrogate: 4-Bromofluorobenzene	93.5		Ħ	100		93.5	80-120			
Matrix Spike (EE41401-MS1)	So	arce: 4E13005-	18	Prepared: ()5/13/04 A	nalyzed: 05	/14/04			
Benzene	2410		ug/kg	2500	ND	96.4	80-120			
Tokiene	2390		-	2500	12.7	95.1	80-120			
Ethylbenzene	2430		-	2500	33.4	95.9	80-120			
Xylene (p/m)	4810		**	5000	94.0	94.3	80-120			
Xylene (0)	2410		۳	2500	27.8	95.3	80-120			
Surrogate: a,a,a-Trifluorotoluene	86.8		N	100		86.8	80-120			
Surrogate: 4-Bromofluorobenzene	99.5		10	100		99.5	80-120			
Matrix Spike Dup (EE41401-MSD1)	So	urce: 4E13005-	18	Prepared: (05/13/04 A	nalyzed: 05	/14/04			
Benzene	2450		ug/kg	2500	ND	98.0	80-120	1.65	20	
Totuene	2410		•	2500	12.7	95.9	80-120	0.838	20	
Ethylbenzene	2420		٠	2500	33.4	95.5	80-120	0.418	20	
Xylene (p/m)	4780		-	5000	94.0	93.7	80-120	0.638	20	
Xylene (o)	2380		N	2500	27.8	94.1	80-120	1.27	20	
Surrogate: a,a,a-Trifluorotoluene	97.8		N	100		97.8	80-120	· · · ·		
Surrogate: 4-Bromofluorobenzene	101		ц	100		101	80-120			

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Quality Assurance Review

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

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	Reporting		Spike	Source		%REC		RPD	
Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared: ()5/13/04 A	nalyzed: 05	/14/04			
100		%							
Sou	rce: 4E13005-	01	Prepared: ()5/13/04 A	nalyzed: 05	/14/04			
97.0		%		97.0			0.00	20	
	100 Sou	Result Limit	Result Limit Units 100 % Source: 4E13005-01	Result Limit Units Level Prepared: (100 % Source: 4E13005-01 Prepared: (Result Limit Units Level Result Prepared: 05/13/04 Ar 100 % Source: 4E13005-01 Prepared: 05/13/04 Ar	Result Limit Units Level Result %REC Prepared: 05/13/04 Analyzed: 05 100 % Source: 4E13005-01 Prepared: 05/13/04 Analyzed: 05	Result Limit Units Level Result %REC Limits Prepared: 05/13/04 Analyzed: 05/14/04 100 % Source: 4E13005-01 Prepared: 05/13/04 Analyzed: 05/14/04	Result Limit Units Level Result %REC Limits RPD Prepared: 05/13/04 Analyzed: 05/14/04 100 % Source: 4E13005-01 Prepared: 05/13/04 Analyzed: 05/14/04	Result Limit Units Level Result %REC Limits RPD Limit Prepared: 05/13/04 Analyzed: 05/14/04 100 % Source: 4E13005-01 Prepared: 05/13/04 Analyzed: 05/14/04

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Quality Assurance Review

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Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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Quality Assurance Review

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Odease, Taxas 79785 Fax: 432-583-1713 Project Manager: KEN DUTTON Company Haros ALL STATE ENVERNMENTAL SYC	F CUSTODY RECORD AND ANALYSIS REQUEST rojest Hams: <u>PAA MNT 12</u> Project #: Project Los: <u>LEA CTT, NM</u> PO #: <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u>TUP:</u> <u></u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Project Los: <u>LEA CTY NM</u> Project Los: <u>LEA CTY NM</u> PO #:
$\begin{array}{c} \text{Company Address: } \overrightarrow{P}. \ O. \ BOX \ 41322: \\ \hline City/BitatarZip: \ MZD (AND), TX \ 99702. \\ \hline Toluphone No: \ 432-682-4282 \\ \hline Sampler Signature: \ Bon \ Hitton \ (5$$) \ (631-9199 \\ \hline \\ \hline \\ \hline \\ \mu 13005 \\ \hline \\ \hline \\ LAB & S(leb use only), \ P \ FIELD CODE \\ \hline \\ $	Project Los: <u>LEA CTY NM</u> PO #:
City/BitatarZip: <u>MZDCAND, TX 99702</u> Telephone No: <u>432-682-3547</u> Sampler Signature: <u>Son</u> <u>DITTO</u> (505) <u>631-9199</u> $\frac{12}{200}$ <u>Processione</u> <u>Maples</u> $\frac{12}{200}$ <u>Maples</u>	Project Los: <u>LEA CTY NM</u> PO #:
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-02 -18 SB-1 15' 1135 99	
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-04 - 14 SB-1 25' 1155	
-05 -5 38-1 35'	┑╞╕╡╔╌╌╞╶╌╴┠╌╌╎╶╌ ╏┍┟┟╎╌╶┟╴ <mark>┙╴╻╋┍┙┠╍┅╎┯╴</mark> ┠╍╖
-04 -16 58-2 28' 1327	┪┥┝┈╎╌╎╌╎╌╎╶┤╶╎╴╎
-07-5 38-2 35' 1359	┫╫┾╌┨╌┨╌┨╌┨╌┨╌┨╌┨╌┨╶╴┨╶╴┨
-08-18 SB-3 5' 1445	╈╫╫╺╢╾┨╼┫╌┥╌┫┿┨╼┨╼┨╶┨╼┨╼┨
-09 -1/9 513-3 35 1519	
-10 -20 SB-4 5' + 153¢ +	
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	Laboratory Comments:
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Project Manager: KEN DUTTON											Pro	joct ł	lame	: Ľ	PAR	7	MI	<u>v</u> T	L	l_	· · · · · · · · · · · · · · · · · · ·	
Company Name ALLSTATE ENSTRO	MENTA	12 SYC	2									Proj	oct #	:								
Company Address: P. D. BOX 1132	2					-			·		p	rojec	t Loc	: L	EA	C	тY		4	1	-	
City/State/Zip: MIDLAND, TX 7	•																					
	·····	Paul Ala		21		91		19					• • •	·								
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Sampler Signature: Ken Hutton											ł					Analy	zef	эr;				7
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WATER WELL REPORT NEW MEXICO OFFICE OF THE STATE ENGINEER

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Township: 19	S Range: 36E	Sections: 12		
NAD27 X:	Y :	Zone:	Searcl	n Radius:
County:	Basin:		Number:	Suffix:
Owner Name: (First)	(La	ast)	۲ Noi	n-Domestic C Domest
		e All		
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AVERAGE DEP	th of water repo	ORT 07/07/20	04	
	TH OF WATER REPO	ORT 07/07/200 Y Wells	(Depth Wate	r in Fest) ax Avg

Record Count: 2

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