MARTIN YATES, III 1912-1985

FRANK W. YATES

S.P. YATES



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118 TELEPHONE (575) 748-1471 JOHN A. YATES CHAIRMAN OF THE BOARD PRESIDENT

JOHN A. YATES JR.

JAMES S. BROWN CHIEF OPERATING OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER



March 12, 2010

Mr. Mike Bratcher NMOCD District II 1301 West Grand Artesia, NM 88210

Re: Dagger Draw Gas System Section 24, T19S-R24E Eddy County, New Mexico

Dear Mr. Bratcher:

Yates Petroleum Corporation would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is being submitted in response to the C-141 report dated December 16, 2009. Scope of work described in the plan will be conducted as soon as the work plan is approved, and a contractor can be scheduled.

If you have any questions call me at (575) 748-4217

Thank you.

YATES PETROLEUM CORPROATION

Robert Asher Environmental Regulatory Agent

Enclosure(s)



**Ares** Petroleum Corporation aarr Dagger Draw Gas System Work Plan Section 24, T19S-R24E Eddy County, New Mexico 77 March 12, 2010 777777 mmmmm

### I. Location

The well is located approximately 25 miles south-southwest of Artesia, NM 1 mile south of Rockin R Red Road (CR 21), as represented by the attached Parish Ranch, NM, USGS Quadrangle Map.

### II. Background

On December 29, 2009, Yates submitted to the NMOCD District II office a Form C-141 for a release of 40 barrels of oil and 10 barrels of produced water with 38 barrels oil and 7 barrels produced water recovered. This release occurred 12/16/2009. The NMOCD was notified of the release (voicemail and e-mail). The total affected area is approximately 615 feet by 65 feet. Initial delineation samples were taken and analyzed at NMOCD approved laboratory. Results and a sample diagram are enclosed.

### III. Surface and Ground Water

Area surface geology is Paleozoic. The nearest groundwater of record is listed on the New Mexico Office of the State Engineers web site shows the depth to groundwater is approximately 322 feet (Unit Letter B, Section 26, T19S-R24E) making the site ranking for this site a zero (0). Any watercourses in the area are dry and intermittent, except for infrequent flows in response to major precipitation events.

The ranking for this site is zero (0) based on the as following:

Depth to ground water> 100'Wellhead Protection Area> 1000'Distance to surface water body> 1000'

### IV. Soils

The area consists of soils that are loamy, interspersed with caliche and clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

LERNARDE FROD

### V. Scope of Work

Yates Petroleum Corporation will address the remedial actions in two (2) phases. Phase I: The impacted soils that are within draw (Section 25) will be excavated to a depth of 6' and taken to an NMOCD approved facility, during delineation sampling a hardpan layer of material was encountered at the six (6) foot level. Further delineation sampling will be obtained, these samples will be field analyzed for THP, if needed further soils will be excavated, samples will be sent to an NMOCD approved laboratory and analyzed for BTEX and THP. Yates Petroleum Corporation will request a sampling event and then closure of the site (Draw area). Upon final approval the excavated area will be backfilled with clean, like soils (YPC will have the contractor to back drag existing material from the Phase II: The fee surface owner of Section 24 has requested of Yates to draw area). remediate the release area in place to minimize surface disturbance (BTEX/TPH levels are below RRAL's for a site ranking of zero). Yates will have a contractor apply nitrogen fertilizer (10-10-10) at a rate of 10 lbs/1000 sq ft. The fertilizer will be watered and rototilled. This process will be repeated every 30 days for a 90 day period. If needed the area will be re-seeded to the satisfaction of the surface owner.



Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 322', per New Mexico State Engineer Office). All results are ppm. Chloride results are for documentation. BSL - Below Subsurface Level. X - Sample Points

### Dagger Draw Gas System

SAMPLE DIAGRAM (Not to Scale)

Xenco Report #: 361360 & 363597 Report Date: 2/10/2010 & 3/10/2010

Prepared by Robert Asher Environmental Regulatory Agent



Section 24, T19S-R24E

Eddy County, NM

# Analytical Report 363597

for

# **Yates Petroleum Corporation**

**Project Manager: Robert Asher** 

Dagger Draw Gas System Line 30-015-DDGSL

10-MAR-10





### 12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295)



10-MAR-10



Project Manager: Robert Asher Yates Petroleum Corporation 105 South Fourth St. Artesia, NM 88210

### Reference: XENCO Report No: 363597 Dagger Draw Gas System Line Project Address: Eddy County

### **Robert Asher:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 363597. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 363597 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II Odessa Laboratory Manager

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# Sample Cross Reference 363597



### Yates Petroleum Corporation, Artesia, NM

Dagger Draw Gas System Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-004/D	S	Feb-25-10 09:30	4 - 4 ft	363597-001
GS/Comp-005/D	S	Feb-25-10 09:40	5 - 5 ft	363597-002
GS/Comp-006/D	S	Feb-25-10 09:50	6 - 6 ft	363597-003

n Aktar (Hydan Chinden a'r regenerad o celen yn a transwell en angegar follen yn de o comon a celen a'r comon a Manen alle carwer o llaeth a control o cheorygar Ale comaner a llanfy folleffer en claur o comon a comon a com Arren fallen o mee'r llaethar en o mbol o comon a carber a claur Arren yn Marte a Ale comon llaeth o comon o co Arren arren a'r ar a carber a comon comon a carber a carber a carber a carber a Ale comon a comon a comon a com Arren ar an ar a carber a comon comon a carber a carber a carber a carber a carber a comon a comon a comon a c Arren a carber a comon a carber a comon a carber Coman a carber a comon a carber a comon a carber a carber

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Page 3 of 16



## CASE NARRATIVE

Client Name: Yates Petroleum Corporation Project Name: Dagger Draw Gas System Line



Project ID:30-015-DDGSLWork Order Number:363597

Report Date: 10-MAR-10 Date Received: 02/26/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-795790 TPH by SW 8015B None

Batch: LBA-795816 Percent Moisture AD2216A Batch 795816, Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity. Samples affected are: 363597-003, -001, -002.

Batch: LBA-795830 Inorganic Anions by EPA 300 None

Batch: LBA-796540 BTEX by EPA 8021 SW8021BM

Batch 796540, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 363597-001,363597-002. 363597-003, and 363628-001 D 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 363597-001.

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Project Id: 30-015-DDGSL Contact: Robert Asher

Certificate of Analysis Summary 363597 Yates Petroleum Corporation, Artesia, NM Project Name: Dagger Draw Gas System Line



Date Received in Lab: Fri Feb-26-10 09:26 am Report Date: 10-MAR-10

Project Location: Eddy County			,	4244		
			-	Project	Manager: Brent Barron, II	
	Lab Id:	363597-001	363597-002	363597-003		
Australia Domontad	Field Id:	GS/Comp-004/D	GS/Comp-005/D	GS/Comp-006/D		
naisan hay sistinut	Depth:	4-4 ft	5-5 A	6-6 ft		
	Matrix:	SOIL	SOIL	SOIL		
	Sampled:	Feb-25-10 09:30	Feb-25-10 09:40	Feb-25-10 09:50		
Anions in Soil By EPA 300.0	Extracted:					
	Analyzed:	Feb-26-10 21:42	Feb-26-10 21:42	Feb-26-10 21:42		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		38.5 4.69	48.5 4.72	38.2 4.58		
BTEX by EPA 8021	Extracted:	Mar-04-10 07:30	Mar-04-10 07:30	Mar-04-10 07:30		
	Analyzed:	Mar-04-10 14:41	Mar-04-10 15:04	Mar-04-10 16:33		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		1.596 0.2790	ND - 1.117	01 UN 1.089		
Toluene		40.74 0.5580	16.71. 2.235	27.84 2.179		
Ethylbenzene		13.32 0.2790	6.079 1.117	9.206 1.089		
m,p-Xylenes		60.16 0.5580	38.49 2.235	58.36 2.179		
o-Xylene		23.48 0.2790	12.30 1.117	18.41 1.089		
Xylenes, Total		83.64 0.2790	50.79 1.117	76.77 1.089		
Total BTEX		139.30 0.2790	73.58 1.117	113.82 1.089		
Percent Moisture	Extracted:					
	Analyzed:	Feb-26-10 17:00	Feb-26-10 17:00	Feb-26-10 17:00		
	Units/RL:	% RL	% RL	· % RL		
Percent Moisture		10.4 1.00	11.0 1.00	8.21 1.00		
TPH by SW 8015B	Extracted:	Feb-26-10 11:00	Feb-26-10 11:00	Feb-26-10 11:00		
	Analyzed:	Feb-27-10 09:51	Feb-27-10 10:18	Feb-27-10 10:45		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL		
C6-C10 Gasoline Range Hydrocarbons		3220 167	2840 169	2640 163		1
C10-C28 Diesel Range Hydrocarbons		3190 167	1 (1 ) 3310 (1 <del>1</del> 66)	2660 163		
Total TPH		6410 167	6150 169	5300 163		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Odessa Laboratory Manager Brent Barron, II

Τ





- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

\* Outside XENCO's scope of NELAC Accreditation.

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	Company Address: 105 S	outh 4th Street										]			Proje	ŭ	尚 당	dy C	<b>A</b>								
	City/State/Zip: Artesi	a, NM 88210					-									2	# 	5632									
	Telephone No: 575-7	48-4217				Fax No:	- <b>Š</b>	-748	4662					Repo	ít Fo	mat:	×	Sta	dard	•		TRR	•		BOGN	S	
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# Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Petroleum

3635

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9:26

ates

2.24.10

Client

Date/ Time:

Lab ID #:

Initials:

### Sample Receipt Checklist

	•			<u>C</u>	lient Inmais
#1	Temperature of container/ cooler?	(Yes)	No	1.6 °C	
#2	Shipping container in good condition?	(Tes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	(res)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		4
#6	Sample instructions complete of Chain of Custody?	(Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Xes	No		4
#8	Chain of Custody agrees with sample label(s)?	Yes	No	iD written on Cont./ Lid	1
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(res)	No		
#11	Containers supplied by ELOT?	Crea	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	1201222
#13	Samples property preserved?	(es)	No	See Below	
#14	Sample bottles intact?	Yes	No		2
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes)	No	Not Applicable	

### Variance Documentation

Contact

Regarding:

Corrective Action Taken:

Check all that Apply:

See attached e-mail/ fax

Contacted by:

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

-

Date/ Time:

# Analytical Report 361360

for

# **Yates Petroleum Corporation**

**Project Manager: Robert Asher** 

Dagger Draw Gas System Line 30-015-DDGSL

10-FEB-10





### 12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

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Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
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Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295)





10-FEB-10

Project Manager: Robert Asher Yates Petroleum Corporation 105 South Fourth St. Artesia, NM 88210

Reference: XENCO Report No: 361360 Dagger Draw Gas System Line Project Address: Eddy County

### **Robert Asher**:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 361360. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 361360 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II Odessa Laboratory Manager

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# Sample Cross Reference 361360

# Yates Petroleum Corporation, Artesia, NM

Dagger Draw Gas System Line

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
GS/Comp-001/N	S	Feb-02-10 09:38	1 - 1 ft	361360-001
GS/Comp-002/N	S	Feb-02-10 10:20	2 - 2 ft	361360-002
GS/Comp-003/N	· S	Feb-02-10 10:27	3 - 3 ft	361360-003
GS/Comp-001/S	S	Feb-02-10 10:43	1 - 1 ft	361360-004
GS/Comp-002/S	S	Feb-02-10 11:07	2 - 2 ft	361360-005
GS/Comp-003/S	S	Feb-02-10 11:27	3 - 3 ft	361360-006
GS/Comp-001/D	S	Feb-02-10 10:43	1 - 1 ft	361360-007
GS/Comp-002/D	S	Feb-02-10 11:07	2 - 2 ft	361360-008
GS/Comp-003/D	S	Feb-02-10 11:27	3 - 3 ft	361360-009

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Client Name: Yates Petroleum Corporation Project Name: Dagger Draw Gas System Line



Project ID: 30-015-DDGSL Work Order Number: 361360 Report Date: 10-FEB-10 Date Received: 02/05/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-792878 Percent Moisture None

Batch: LBA-792886 Percent Moisture None

Batch: LBA-792890 Inorganic Anions by EPA 300 None

Batch: LBA-792921 BTEX by EPA 8021 None

Batch: LBA-792945 BTEX by EPA 8021 SW8021BM

Batch 792945, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 361360-001 D,361360-004,361360-005,361360-009,361360-008,361360-001,361360-007.

4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 361360-001 D,361360-004,361360-005,361360-007,361360-009,361360-008,361360-001.

Batch: LBA-793095 TPH by SW 8015B SW8015B\_NM

Batch 793095, C10-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike.

Samples affected are: 361360-003, -004, -006, -001, -002, -005, -009, -008, -007. The Laboratory Control Sample for C10-C28 Diesel Range Hydrocarbons is within laboratory Control Limits



CASE NARRATIVE

Client Name: Yates Petroleum Corporation Project Name: Dagger Draw Gas System Line



Project ID: 30-015-DDGSL Work Order Number: 361360

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Report Date: 10-FEB-10 Date Received: 02/05/2010

Batch: LBA-793130 BTEX by EPA 8021 SW8021BM

Batch 793130, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 361360-002. 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 361360-002.

### SW8021BM

Batch 793130, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 361360-002.

The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits



# Certificate of Analysis Summary 361360 Yates Petroleum Corporation, Artesia, NM Project Name: Dagger Draw Gas System Line



Project Id: 30-015-DDGSL Contact: Robert Asher Project Location: Eddy County

Date Received in Lab: Fri Feb-05-10 04:30 pm Report Date: 10-FEB-10

oject Location: Eagy County			. ·	•	Project Manager: E	srent Barron, II	
	Lab Id:	361360-001	361360-002	361360-003	361360-004	361360-005	361360-006
	Field Id:	GS/Comp-001/N	GS/Comp-002/N	GS/Comp-003/N	GS/Comp-001/S	GS/Comp-002/S	GS/Comp-003/S
naisan bay sistinut	Depth:	1-I ft	2-2 ft	3-3 ft	1-1 A	2-2 Ĥ	3-3 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Feb-02-10 09:38	Feb-02-10 10:20	Feb-02-10 10:27	Feb-02-10 10:43	Feb-02-10 11:07	Feb-02-10 11:27
Anions in Soil By EPA 300.0	Extracted:						
	Analyzed:	Feb-08-10 09:54	Feb-08-10 09:54	Feb-08-10 09:54	Feb-08-10 09:54	Feb-08-10 09:54	Feb-08-10 09:54
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		19.0 4.54	61.4 4.60	9.34 4.23	56.1 4.47	103 9.38	12.3 4.29
BTEX by EPA 8021	Extracted:	Feb-08-10 09:00	Feb-09-10 14:00	Feb-08-10 09:00	Feb-08-10 09:00	Feb-08-10 09:00	Fcb-08-10 09:00
	Analyzed:	Feb-09-10 00:12	Feb-10-10 05:00	Feb-08-10 18:09	Feb-09-10 01:42	Fcb-09-10 02:26	Feb-08-10 18:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		0.4394 0.2681	ND 0.0054	ND 0.0010	ND 0.0106	ND 0.0056	ND 0.0010
Toluene		7.642 0.5361	0.0184 0.0108	ND 0.0020	0.1668 0.0212	0.0209 0.0111	ND 0.0020
Ethylbenzene		3.936 0.2681	0.0221 0.0054	ND 0.0010	0.0793 0.0106	0.0444 0.0056	ND 0.0010
m,p-Xylenes		18.07 0.5361	0.1992 0.0108	ND 0.0020	0.2057 0.0212	0.1657 0.0111	ND 0.0020
o-Xylene		9.165 0.2681	0.1395 0.0054	0.0014 0.0010	0.1324 0.0106	0.0762 0.0056	ND 0.0010
Xylenes, Total		27.24 0.2681	0.3387 0.0054	0.0014 0.0010	0.3381 0.0106	0.2419 0.0056	ND 0.0010
Total BTEX		39.25 0.2681	0.3792 0.0054	0.0014 0.0010	0.5842 0.0106	0.3072 0.0056	ND 0.0010
Percent Moisture	Extracted:						
	Analyzed:	Feb-08-10 17:00	Feb-08-10 17:00	Feb-08-10 17:00	Feb-08-10 17:00	Feb-08-10 17:00	Feb-08-10 17:00
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		7.48 1.00	8.70 1.00	ND 1.00	5.94 1.00	10.4 1.00	2.08 1.00
TPH by SW 8015B	Extracted:	Feb-08-10 10:00	Feb-08-10 10:00	Feb-08-10 10:00	Feb-08-10 10:00	Feb-08-10 10:00	Feb-08-10 10:00
	Analyzed:	Feb-09-10 10:04	Feb-09-10 10:30	Feb-09-10 10:58	Feb-09-10 11:42	Feb-09-10 12:36	Fcb-09-10 13:13
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		1930 161	85.9 16.4	15.1 ND 15.1	294 15.9	117 16.7	ND 15.2
C10-C28 Diesel Range Hydrocarbons		3040 161	429 16.4	49.9 15.1	1180 15.9	467 16.7	49.9 15.2
Total TPH		4970 161	515 16:4	49.9 15.1	1474 15.9	584 16.7	49.9 15.2

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Odessa Laboratory Manager Brefit Barron, II

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Certificate of Analysis Summary 361360 Yates Petroleum Corporation, Artesia, NM Project Name: Dagger Draw Gas System Line



Project Id: 30-015-DDGSL Contact: Robert Asher Project Location: Eddy County

Date Received in Lab: Fri Feb-05-10 04:30 pm Report Date: 10-FEB-10

-

roject Location: Eddy County					Project Manager: Brent Barron, II
	Lab Id:	361360-007	361360-008	361360-009	
	Field Id:	GS/Comp-001/D	GS/Comp-002/D	GS/Comp-003/D	
Analysis Kequested	Depth:	1-1 Ĥ	2-2 A	3-3 ft	
	Matrix:	SOIL	SOIL	SOIL	
	Sampled:	Feb-02-10 10:43	Feb-02-10 11:07	Feb-02-10 11:27	
Anions in Soil By EPA 300.0	Extracted:				
	Analyzed:	Feb-08-10 09:54	Feb-08-10 09:54	Feb-08-10 09:54	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		11.9 4.42	56.9 4.75	62.1 4.87	
BTEX by EPA 8021	Extracted:	Feb-08-10 09:00	Feb-08-10 09:00	Feb-08-10 09:00	
	Analyzed:	Feb-09-10 03:11	Feb-09-10 07:38	Feb-09-10 05:03	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		0.3181 0.2101	1.308 0.2252	0.7641 0.2872	
Toluene		9.101 0.4203	29.81 0.4504	18.72 0.5743	
Ethylbenzene		5.059 0.2101	12.41 0.2252	8.081 0.2872	
m,p-Xylenes		12.68 0.4203	63.05 0.4504	45.24 0.5743	
o-Xylene		10.24 0.2101	22.28 0.2252	15.98 0.2872	6
Xylenes, Total		22.92 0.2101	85.33 0.2252	61.22 0.2872	
Total BTEX		37.40 0.2101	128.86 0.2252	88.79 0.2872	
Percent Moisture	Extracted:			r	
	Analyzed:	Feb-08-10 17:00	Feb-08-10 17:00	Feb-08-10 17:00	
	Units/RL:	% RL	% RL	% RL	
Percent Moisture		5.01 1.00	11.5 1.00	13.8 1.00	
TPH by SW 8015B	Extracted:	Feb-08-10 10:00	Feb-08-10 10:00	Feb-08-10 10:00	
	Analyzed:	Feb-09-10 13:46	Feb-09-10 14:13	Fcb-09-10 14:40	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	
C6-C10 Gasoline Range Hydrocarbons		2050 157	5540 339'	2170 173	
C10-C28 Diesel Range Hydrocarbons		3700 157	10 × 10 € 240° ± 1 339	2700 173	
Total TPH		5750 157	11780 339	4870 173	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratorics assumes no responsibility and makes no warrany to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Odessa Laboratory Manager Brent Barron, II

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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- **E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

**RL** Reporting Limit

\* Outside XENCO's scope of NELAC Accreditation.

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	City/State/Zip:	Artesia, NM 88210													I			õ	힡	632								1
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# Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client:	Vates Petroleum
Date/ Time:	2.5.10 16:30
Lab ID # :	361360
Initials:	M

Service Service

TANK AND A LO

### Sample Receipt Checklist

			·	C	lient Initials
#1	Temperature of container/ cooler?	Yes	No	5.1 °C	
#2	Shipping container in good condition?	(Tes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	<b>1</b>
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No	i contra	
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	77es)	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	te traine e
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No	and the second	
#11	Containers supplied by ELOT?	(Yes)	No	a and a start from	
#12	Samples in proper container/ bottle?	Yes	No	See Below	al an All an an an All an An All an All
#13	Samples properly preserved?	Aes	No	See Below	ال مرتبع المرتبع المرتب المرتب المرتبي من مرتبع مرتبع المرتبع ال
#14	Sample bottles intact?	(Yes)	No	م در این میں ایک	
#15	Preservations documented on Chain of Custody?	(Yes)	No		بالان و در الارام و در الانتخاب المعاد موسط
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	· · · · · · · · · · · · · · · · · · ·
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_
Regarding: \_\_\_\_\_

Corrective Action Taken:

Check all that Apply:

See	attached	e-mail/	fax
-----	----------	---------	-----

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

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