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

JUN 18 2007

OCD-ARTESIA

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No X
Type of action Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank X

Operator **Parallel Petroleum Corporation** Telephone. **432-684-3905** e-mail address **ddurham@pll.com**
Address **1004 N. Big Spring Street, Suite 400, Midland, Texas 79701**
Facility or well name **Hope Unit 1821-16 State #1 Y** API # **30-015-35561** U/L or Qtr/Qtr **P** Sec **16** T **18S** R **21E**
County **Eddy** Latitude **32° 44' 33.14 N** Longitude **104° 47' 28.26 W** NAD 1927 X 1983 ☐
Surface Owner Federal ☐ State **X** Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type Drilling **X** Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined **X** Unlined ☐ Liner type Synthetic **X** Thickness **12** mil Clay ☐ Pit Volume **25,000** bbl	Volume ____ bbl Type of fluid ____ Construction material ____ Double-walled, with leak detection? Yes ☐ If not, explain why not	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water) **750'**	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) **0** (0 points)
Wellhead protection area (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes No	(20 points) (0 points) **0**
Distance to surface water (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) **0**
	Ranking Score (Total Points)	**0**

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location (check the onsite box if your are burying in place) onsite X offsite ☐ If offsite, name of facility____ (3) Attach a general description of remedial action taken including remediation start date and end date (4) Groundwater encountered: No X Yes ☐ If yes, show depth below ground surface ____ ft and attach sample results (5) Attach soil sample results and a diagram of sample locations and excavations

Additional Comments ~~The drilling pit for this site will be closed as per the attached Pit Closure Plan.~~ **Accepted for record NMOCD**
Pit will be reopened as a frac pit after drilling mud is removed. See second attached Pit Permit for information.
Cleared To Close by Tim Gum - 7-17-07 - No Issues
Pit Was Closed on 7-17-07. Mud was placed in a Lined Trench & Covered W/ 3' Of Soil. Pit was reopened as a Fresh Water Frac Pit. Gary Miller (Sample results Attached)

I hereby certify that the information above is true and complete to the best of my knowledge and belief **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date 5-14-07
Printed Name/Title **Gary Miller, Agent** Signature ____

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations

Notify OCD 24 hours prior to beginning pit closure.

Samples are to be obtained from pit area and analysis submitted to NMOCD prior to back-filling

Signed By Mike Bratcher
Signature ____ Date JUN 22 2007

Moved To Close
by Final Sund on 7-17-07

Highlander Environmental Corp.

Pit Closure Sampling Report

WOC

Job Number: 2826
Client: Parallel
Well Name Hope Unit 1821-15 State #1Y
API# 30-015-35561
Depth of Pit 10'
Location and Depth of Background sample

All pit sample depths are *below pit bottom* (BPB)

Sample Location	Depth (BPB)	Field Chloride Results (ppm)	Lab Chloride Results (ppm)
North east	2.0'	560	DNR
	5.0'	1,120	DNR
	10.0'	700	DNR
	15.0'	250	64.2
North west	2.0'	800	DNR
	5.0'	800	DNR
	10.0'	260	<50
Center	2.0'	420	DNR
	5.0'	300	DNR
	10.0'	250	<50
South west	2.0'	400	DNR
	5.0'	240	<50
South east	2.0'	720	DNR
	5.0'	720	DNR
	10.0'	400	DNR
	15.0'	320	DNR
	20.0'	220	<50

DNR- Did not run at lab.
BGS- Below Ground Surface
BPB- Below Pit Bottom

Highlander Environmental Corp.
Pit Sample Location Plat

Pit wall in feet 180'

Pit wall in feet 185'

× Southwest × Northwest

× Center

Depth of pit in feet 10'

× Southeast × Northeast

× _____ Indicates Sample Location
(Name by quarter i.e. NW, NE etc)

→ Draw in North Arrow

• Wellhead

Well Pad

Client: Parallel

Well Name: Hope Unit 1821-15 State #1Y

API# 30-015-35561

Summary Report

Gary Miller
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: July 20, 2007

Work Order: 7071718

Project Location: Eddy County, NM
Project Name: Parallel/Hope Unit 1821-15 State#1Y
Project Number: 2826

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
130158	Northeast 15 0'	soil	2007-07-16	00:00	2007-07-17
130159	Northwest 10.0'	soil	2007-07-16	00:00	2007-07-17
130160	Center 10.0'	soil	2007-07-16	00:00	2007-07-17
130161	Southwest 5.0'	soil	2007-07-16	00:00	2007-07-17
130162	Southeast 20.0'	soil	2007-07-16	00:00	2007-07-17

Sample: 130158 - Northeast 15.0'

Param	Flag	Result	Units	RL
Chloride		**64.2**	mg/Kg	2.00

Sample: 130159 - Northwest 10.0'

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Sample: 130160 - Center 10.0'

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Sample: 130161 - Southwest 5.0'

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Sample: 130162 - Southeast 20.0'

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 (800•378•1296 (806•794•1296 FAX (806•794•1298
2501 Cedar Street, Road, Suite I El Paso, Texas 79922 (888•588•3443 (915•585•3443 FAX (915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 (432•689•6301 FAX (432•689•6313
1061 Keystone Parkway, Suite 10 Fort Worth, Texas 76140 (817•201•5260

e-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Gary Miller
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: July 20, 2007

Work Order: 7071718

Project Location: Eddy County, NM
Project Name: Parallel/Hope Unit 1821-15 State#1Y
Project Number: 2826

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
130158	Northeast 15.0'	soil	2007-07-16	00:00	2007-07-17
130159	Northwest 10.0'	soil	2007-07-16	00:00	2007-07-17
130160	Center 10.0'	soil	2007-07-16	00:00	2007-07-17
130161	Southwest 5 0'	soil	2007-07-16	00:00	2007-07-17
130162	Southeast 20.0'	soil	2007-07-16	00:00	2007-07-17

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 130158 - Northeast 15.0'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39239	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33963	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**64.2**		mg/Kg	25	2.00

Sample: 130159 - Northwest 10.0'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39240	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33964	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<50.0		mg/Kg	25	2.00

Sample: 130160 - Center 10.0'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39240	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33964	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<50.0		mg/Kg	25	2.00

Sample: 130161 - Southwest 5.0'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39240	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33964	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<50.0		mg/Kg	25	2.00

Sample: 130162 - Southeast 20.0'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39240	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33964	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

Method Blank (1) QC Batch: 39239

QC Batch:	39239	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33963	QC Preparation:	2007-07-19	Prepared By	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 39240

QC Batch:	39240	Date Analyzed:	2007-07-19	Analyzed By	AR
Prep Batch:	33964	QC Preparation:	2007-07-19	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Laboratory Control Spike (LCS-1)

QC Batch:	39239	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33963	QC Preparation:	2007-07-19	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.5	mg/Kg	1	100	<0.500	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.5	mg/Kg	1	100	<0.500	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:	39240	Date Analyzed:	2007-07-19	Analyzed By:	AR
Prep Batch:	33964	QC Preparation:	2007-07-19	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.8	mg/Kg	1	100	<0.500	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	97.7	mg/Kg	1	100	<0.500	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 130158

QC Batch: 39239 Date Analyzed: 2007-07-19 Analyzed By: AR
Prep Batch: 33963 QC Preparation: 2007-07-19 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	2420	mg/Kg	25	2500	64.194	94	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Chloride	2450	mg/Kg	25	2500	64.194	95	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result

Matrix Spike (MS-1) Spiked Sample: 130162

QC Batch: 39240 Date Analyzed: 2007-07-19 Analyzed By: AR
Prep Batch: 33964 QC Preparation: 2007-07-19 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	2520	mg/Kg	25	2500	<12.5	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Chloride	2550	mg/Kg	25	2500	<12.5	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 39239 Date Analyzed: 2007-07-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2007-07-19

Standard (CCV-1)

QC Batch: 39239 Date Analyzed: 2007-07-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2007-07-19

Standard (ICV-1)

QC Batch: 39240 Date Analyzed: 2007-07-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-07-19

Standard (CCV-1)

QC Batch: 39240 Date Analyzed: 2007-07-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.7	99	85 - 115	2007-07-19

Work Order # 7071718

Analysis Request and Chain of Custody Record

PAGE: 1 OF: 1

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Parallel | SITE MANAGER: Gary Miller

PROJECT NO.: 2826 | PROJECT NAME: Parallel / Hope Unit 1821-15 State #1Y Eddy County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GCMS Vol. 8240/8260/624	GCMS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
130158	7/16/07		S		X	Northeast 15.0'	1				X															X			
159	↓		S		X	Northwest 10.0'	1				X															X			
160			S		X	Center 10.0'	1				X															X			
161			S		X	Southwest 5.0'	1				X															X			
162			S		X	Southeast 20.0'	1				X															X			

RELINQUISHED BY: (Signature) Date: 7/17/07 Time: 10:00 | RECEIVED BY: (Signature) Date: Time: | SAMPLED BY: (Print & Sign) Roy Taylor & Kolt Harrison Date: 7/17/07 Time:

RELINQUISHED BY: (Signature) Date: Time: | RECEIVED BY: (Signature) Date: Time: | SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time: | RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace | RECEIVED BY: (Signature)
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE: DATE: 7.17.07 TIME: 10:00

HIGHLANDER CONTACT PERSON: Gary Miller

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 2.0°C intact

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS:

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.