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

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

FEB 10 2009

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
- ☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Parallel Petroleum Corporation OGRID #: 230387
Address: 1004 N. Big Spring, Suite 400, Midland, Texas 79701
Facility or well name: Thunder Gulch Fed Com 1525-4 #1H Dual well site with the Grindstone 1525-5 #1H
API Number: 30-005-63948 OCD Permit Number: NA
U/L or Qtr/Qtr I Section 5 Township 15S Range 25W County: Chaves
Center of Proposed Design: Latitude **32°02' 32.00" N** Longitude **104°27' 24.03" W** NAD: ☒ 1927 ☐ 1983
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC Pre Rule Pit approval drilling when rule passed,
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other _____ Volume: 25000 bbl Dimensions: L 150 x W 150 x D 15

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____bbl Type of fluid: _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

ENTERED Closure

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☒ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method:
- ☐ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: Controlled Recovery, Inc Disposal Facility Permit Number: R-9166

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Deane Durham Title: Drilling Engineer

Signature: Date:

e-mail address: ddurham@plll.com Telephone: 432-684-3727

20.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: **Approval Date:**

Title: **OCD Permit Number:**

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date: 11-12-2008**

22.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: Controlled Recovery, Inc Disposal Facility Permit Number: R-9166

Disposal Facility Name: Disposal Facility Permit Number:

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☒ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number
☒ Soil Backfilling and Cover Installation
☒ Re-vegetation Application Rates and Seeding Technique
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude **32°02' 32.00" N** Longitude **104°27' 24.03" W** NAD: ☒1927 ☐ 1983

25.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Deane Durham Title: Drilling Engineer

Signature: Deane Durham Date: 2-9-09

e-mail address: ddurham@plll.com Telephone: 432-684-3727

Accepted for record
NMOCD

FEB 19 2009

Tetra Tech

Pit Closure Sampling Report

Job Number: 115-6402896 **Date:** 12/1/2008

Client: **Parrallel Petroleum**

Well Name **Thunder Gulch 1525-4 Fed Com#1**

API# 30-005-63948

Depth of Pit 15

Depth to Groundwater 95'

Orientation of pi North

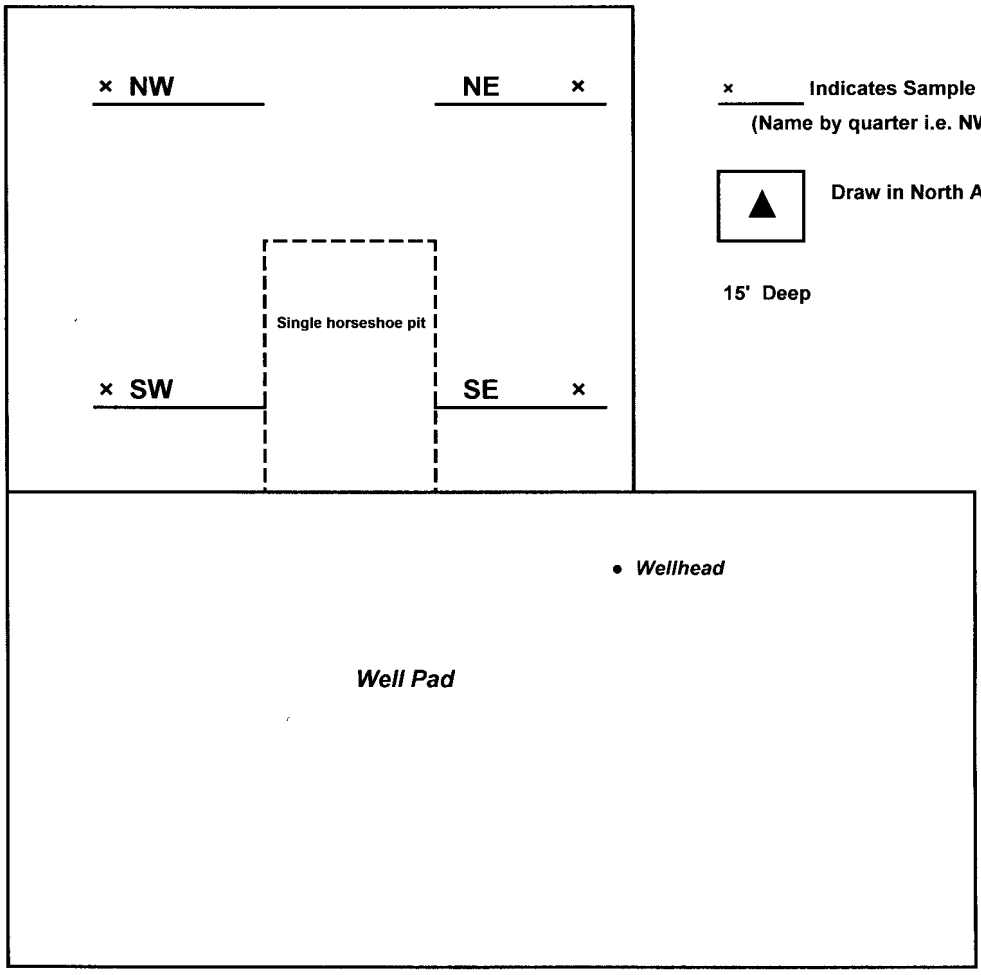
Burial trench location from reserve pit **N A**

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

Sample Location	Depth (BPB)	Field Chloride Results (mg/Kg)and OVM Results (ppm)	Lab Chloride and TPH 418.1 (mg/kg)	Soil to be excavated	Soil to be left in-situ
NE	2'	150 mg/kg	271 mg/kg		
		.00 ppm	<10.0		
NW	2'	1950 mg/kg		X	
		0.0 ppm			
NW	5'	2000 mg/kg		X	
		2.1 ppm			
NW	10'	100 mg/kg	161 mg/kg	X	
		0.0 ppm	<10.0		
SE	2'	3300 mg/kg	3450 mg/kg		X
Rock-Solid		0.3 ppm	<10.0		
SE	5'	1850 mg/kg			X
Rock-Solid		0.3 ppm			
SE	10'	299 mg/kg			X
		0.0 ppm			
SE	12'	199 mg/kg	222 mg/kg		X
		0.0 ppm	<10.0		
SW	2'	650 mg/kg		X	
		4.0 ppm			
SW	5'	500 mg/kg		X	
		0.0 ppm			
SW	10'	499 mg/kg		X	
Rock-Solid		0.0 ppm			
SW	15'	199 mg/kg	222 mg/kg		X
		0.0 ppm	<10.0		

BGS- Below Ground Surface BPB- Below Pit Bottom

Tetra Tech
Pit Sample Location Plat



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

Draw in North Arrow

15' Deep

Client: Parallel Petroleum

Well Name: Thunder Gulch 1525-4 Fed Com #1

API# 30-005-63948

Summary Report

Gary Miller
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: November 20, 2008

Work Order: 8111227

Project Location: Chaves Co., NM
Project Name: Thunder Gulch 1525-4 Fed. Com. #1
Project Number: 2896

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
179044	NE 2'	soil	2008-11-11	00:00	2008-11-12
179045	NW 10'	soil	2008-11-11	00:00	2008-11-12
179046	SE 2'	soil	2008-11-11	00:00	2008-11-12
179047	SW 15'	soil	2008-11-11	00:00	2008-11-12

	BTEX				TPH 418.1	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	TRPHC	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
179044 - NE 2'	<0.0100	<0.0100	<0.0100	<0.0100	<10.0	<50.0	<1.00
179045 - NW 10'	<0.0100	<0.0100	<0.0100	<0.0100	<10.0	<50.0	<1.00
179046 - SE 2'	<0.0100	<0.0100	<0.0100	<0.0100	<10.0	<50.0	**1.12**
179047 - SW 15'	<0.0100	<0.0100	<0.0100	<0.0100	<10.0	<50.0	**1.09**

Sample: 179044 - NE 2'

Param	Flag	Result	Units	RL
Chloride		**271**	mg/Kg	2.00

Sample: 179045 - NW 10'

Param	Flag	Result	Units	RL
Chloride		**161**	mg/Kg	2.00

Sample: 179046 - SE 2'

Param	Flag	Result	Units	RL
Chloride		**3450**	mg/Kg	2.00

Sample: 179047 - SW 15'

Param	Flag	Result	Units	RL
Chloride		**759**	mg/Kg	2.00

Summary Report

Gary Miller
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: December 11, 2008

Work Order: 8120229

Project Location: Chaves Co., NM
Project Name: Thunder Gulch 1525-4 Fed. Com. #1
Project Number: 2896

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
180923	SE 12'	soil	2008-12-01	00:00	2008-12-02
180924	SW 15'	soil	2008-12-01	00:00	2008-12-02

	BTEX				TPH 418.1	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	TRPHC	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
180923 - SE 12'	<0.0100	<0.0100	<0.0100	<0.0100	<10.0	<50.0	**4.46**
180924 - SW 15'	<0.0100	<0.0100	<0.0100	<0.0100	<10.0	<50.0	<1.00

Sample: 180923 - SE 12'

Param	Flag	Result	Units	RL
Chloride		**138**	mg/Kg	2.00

Sample: 180924 - SW 15'

Param	Flag	Result	Units	RL
Chloride		**222**	mg/Kg	2.00

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

JUN 20 2007
OCD-ARTESIA

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0136
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM NM 112249

6. If Indian, Allotee or Tribe Name:

1a. Type of work: [✓] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No.:

1b. Type of Well: [ ] Oil Well [✓] Gas Well [ ] Other [✓] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: Thunder Gulch 1525-4 Fed Com #1 36573

2. Name of Operator: Parallel Petroleum Corporation 230387

9. API Well No.: 30-005-63948

3a. Address: 1004 North Big Spring, Suite 400, Midland, Texas

3b. Phone No. (include area code): 432/684-3727 wildcat

10. Field and Pool, or Exploratory: Wolfcamp

4. Location of Well (Report location clearly and in accordance with any State requirements *)
At surface: SHL 1880' FSL AND 190' FEL Sec 5, T15S-R25E
At proposed prod. zone: BHL 1880' FSL AND 660' FEL Sec 4, T15S-R25E

11. Sec., T. R. M or Blk and Survey or Area: 4-T15S-R25E

14. Distance in miles and direction from nearest town or post office*: 5 miles North of Artesia, New Mexico

12. County or Parish: Chaves

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
660'	2435.41	320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
2500'	5500'	NMB000265
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
GL 3546'	05/15/2007	30 days

24. Attachments

ROSWELL CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form.

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office)
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (Printed/Typed)	Date
Deane Durham	Deane Durham	3-19-07

Title: Engineer, Parallel Petroleum Corporation

Approved by (Signature)	Name (Printed/Typed)	Date
/S/ JOHN S. SIMITZ	/S/ JOHN S. SIMITZ	JUN 18 2007
Title	**Office**	
Acting Assistant Field Manager, Lands And Minerals	ROSWELL FIELD OFFICE	APPROVED FOR 2 YEARS

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DECLARED WATER BASIN

CEMENT BEHIND THE 8⅝" CASING MUST BE CIRCULATED

WITNESS

TETRA TECH

February 6, 2009

Mr. Mike Bratcher
NMOCD District II
1301 W. Grand Avenue
Artesia, New Mexico 88210

Re: Parallel Petroleum Corporation,
Thunder Gulch 1525-4 #1H and Grindstone 1525-5 #1H
Dual well location Final Pit Closure results

Dear Mr. Bratcher;

The following information is being submitted with the attached C-144 for the above mentioned wellsite. The second well was drilling at the time the new pit rules were put into effect and this is a Federal location.

Section 15

Protocols and Procedures – based upon the appropriate requirements of 19.15.17.13 NMAC will be followed.

Confirmation Sampling Plan (required) – based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC. The pit a single horseshoe design, the drilling mud and cutting will be removed and the four corners will be sampled. Samples will be analyzed for BTEX, Chlorides, and Total Petroleum Hydrocarbons utilizing both the 418.1 and 8015 methods. Results of the field and lab analysis are attached.

Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Controlled Recovery Inc. Permit Number R-9166

Soil and Backfill Cover Design Specifications – based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC, Backfill will consist of a minimum of 3' native soil and 1' of top soil as per BLM and NMOCD requirements. Due to rock conditions some elevated chlorides were left in the pit area. The bottom of the pit was leveled and a 20 mil liner was bedded with sand and the pit backfilled. Photographs of the liner and backfilled pit area are attached.

Re-vegetation Plan – based upon the appropriate requirements of Subsection 1 of 19.15.17.13 NMAC, This is a Federal well site and the Re-vegetation will be performed to BLM specifications.

Site Reclamation Plan – based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC. This is a Federal well site and the Site Reclamation will be performed to BLM specifications.

If you require any additional information please call 432-682-4559.

Sincerely,

Gary Miller,
Sr. Project Manager

Tetra Tech
1910 North Big Spring Midland, TX 79705
Gary.Miller@TetraTech.com Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

TETRA TECH

FEB 10 2009

February 6, 2009

Mr. Mike Bratcher
NMOCD District II
1301 W. Grand Avenue
Artesia, New Mexico 88210

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Section 24

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If you require any additional information please call 432-682-4559.

Sincerely,

Gary Miller,
Sr. Project Manager

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1910 North Big Spring, Midland, TX 79705
Gary.Miller@TetraTech.com Tel 432 682 4559 Fax 432 682 3946 www.tetratech.com