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

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NOV -5 2009
NMOCD ARTESIA

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

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.

YPC
YPC
YPC

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

Rule 50 permitted

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
Final Closure Report ☐ 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 **Yates Petroleum Corp.** OGRID # 025575
Address: **105 South 4th. Artesia N.M. 88210**
Facility or well name: Tombstone BMB St #1
API Number 30-015-36315 OCD Permit Number:
U/L or Qtr/Qtr D Section 12 Township 25S Range 29E County. Eddy
Center of Proposed Design: Latitude 32 151047 Longitude 103.944475 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
Temporary: ☐ Drilling ☒ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other Volume. 13,000 bbl Dimensions: L 150 x W 150 x D 6

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

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

Final closure date: 5/29/09

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: _____ Disposal Facility Permit Number. _____

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

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

OCD Representative Signature: _____ **Mike Bratcher** _____ **Approval Date:** **Mar. 6- 2009**

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:** 5-29-09

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: _____ Disposal Facility Permit Number: _____

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 **Lea Land WM-1-035**
☒ Soil Backfilling and Cover Installation **Caliche from Lea Land**
☒ Re-vegetation Application Rates and Seeding Technique - Seeded with 33 Lbs. Winter Wheat will Reseed Late June 2010
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ 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): **Scott Pitts** Title: **Construction Supervisor**

Signature _____ Date: 8-10-2009

e-mail address: **scottp@yatespetroleum.com** Telephone: **(575)-365-4716**

Accepted for record
NMOCD NOV 06 2009

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
YATES PETROLEUM CORPORATION
ATTN: SCOTT PITTS
105 SOUTH 4TH STREET
ARTESIA, NM 88210
FAX TO: (575) 748-4229

Receiving Date: 04/09/09
Reporting Date: 04/09/09
Project Number: NOT GIVEN
Project Name: TOMBSTONE
Project Location: NOT GIVEN

Analysis Date: 04/09/09
Sampling Date: 04/07/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: TR

LAB NUMBER	SAMPLE ID	Cl^- (mg/kg)
H17214-1	5-SPOT 9' BG 2	2,040
H17214-2	NW 9' BG2	1,280
H17214-3	NE 9 ' BG2	192
H17214-4	SW 9' BG2	496
H17214-5	SE 9' BG2	384
H17214-6	MID 9' BG2	7,800
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

Cleaned Out Pit Bottom

METHOD: Standard Methods	4500-Cl^-B

Note: Analyses performed on 1:4 w:v aqueous extracts.

Chemist

04/14/09
Date

H17214 YATES

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
YATES PETROLEUM CORPORATION
ATTN: SCOTT PITTS
105 SOUTH 4TH STREET
ARTESIA, NM 88210
FAX TO: (575) 748-4229

Receiving Date: 04/09/09
Reporting Date: 04/13/09
Project Owner: NOT GIVEN
Project Name: TOMBSTONE
Project Location: NOT GIVEN

Sampling Date: 04/07/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: ZL

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE		04/13/09	04/13/09	04/13/09	04/13/09
H17214-1	5-SPOT 9' BG2	<0.050	<0.050	<0.050	<0.300
Quality Control		0.059	0.054	0.051	0.163
True Value QC		0.050	0.050	0.050	0.150
% Recovery		118	108	102	109
Relative Percent Difference		3.7	4.0	7.8	10.5

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

04/14/09
Date

H17214B YATES

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
YATES PETROLEUM CORPORATION
ATTN: SCOTT PITTS
105 SOUTH 4TH STREET
ARTESIA, NM 88210
FAX TO: (575) 748-4229

Receiving Date: 04/09/09
Reporting Date: 04/13/09
Project Owner: NOT GIVEN
Project Name: TOMBSTONE
Project Location: NOT GIVEN

Sampling Date: 04/07/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	418.1 TOTAL TPH (mg/kg)
ANALYSIS DATE	04/10/09	04/10/09	04/09/09
H17214-1 5-SPOT 9' BGL	<10.0	<10.0	<100
Quality Control	554	551	324
True Value QC	500	500	300
% Recovery	111	110	108
Relative Percent Difference	1.7	<0.1	1.2

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; EPA 418.1

Chemist

04/14/09
Date

H17214 TPH2 YATES

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

E-Mail scottp@yatespetroleum.com

Page ____ of ____

Company Name:	Yates Petroleum Corp	**BILL TO**	
Project Manager:	Scott Pitts	P.O. #:	103-2542
Address:	105 S. 4th	Company:	Yates Petrokum
City:	Artesia State NM Zip: 88210	Attn:	Scott Pitts
Phone #:	(575) 385-4716 Fax #: 575-748-4229	Address:	
Project #:	Project Owner:	City:	
Project Name:	Tombstone	State:	Zip:
Project Location:		Phone #:	
Sampler Name:	Scott Pitts	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides 300.1	TPH 8015 m	TPH 418.1	BTEX 8021B
H17214-1	5-Spot 9' BGL	C				✓					✓		4-7-09	3:00	✓	✓	✓	✓
-2	NW 9' BGL					✓					✓		"	1:15	✓			
-3	NE 9' BGL					✓					✓		"	1:30	✓			
-4	SW 9' BGL					✓					✓		"	1:00	✓			
-5	SE 9' BGL					✓					✓		"	1:40	✓			
-6	MID 9' BGL					✓					✓		"	1:45	✓			
	(COPB = Cleaned Out Pit Bottom)																	

Sampler Relinquished:	Scott Pitts	Date: 4-8-09 Time: 4:00	Received By: Steven Beattie Odessa
Relinquished By:		Date: 4/9/09 Time: 8:05	Received By: Misty L Burt
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Temp.	Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No
			CHECKED BY: (Initials) MCBB

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
YATES PETROLEUM CORPORATION
ATTN: SCOTT PITTS
105 SOUTH 4TH STREET
ARTESIA, NM 88210
FAX TO: (575) 748-4229

Receiving Date: 04/09/09
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Project Number: NOT GIVEN
Project Name: TOMBSTONE
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Analysis Date: 04/09/09
Sampling Date: 04/07/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: TR

LAB NUMBER	SAMPLE ID	Cl^- (mg/kg)
H17215-1	NW 13' BG2	144
H17215-2	NW 11' BG2	928
H17215-3	NE 13' BG2	16
H17215-4	NE 11' BG2	32
H17215-5	SW 13' BG2	752
H17215-6	SW 11' BG2	2,080
H17215-7	SE 13' BG2	4,400
H17215-8	SE 11' BG2	4,480
H17215-9	MIDDLE 16' BG2	352
H17215-10	MIDDLE 13' BG2	1,740
H17215-11	MIDDLE 11' BG2	10,600
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

Delineation Samples

METHOD: Standard Methods	4500-ClˉB

Note: Analyses performed on 1:4 w:v aqueous extracts.

Chemist

04/13/09
Date

H17215 YATES

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

E-MAIL scottp@yatespetroleum.com

Page ____ of ____

Company Name:	Yates Petroleum Corp
Project Manager:	Scott Pitts
Address:	105 S. 4th
City:	Artesia
State	NM
Zip:	88210
Phone #:	(575) 385-4718
Fax #:	575-748-4229
Project #:	
Project Owner:	
Project Name:	Tombstone
Project Location:	
Sampler Name:	

BILL TO

P.O. #:	103-2542
Company:	Yates Petrokum
Attn:	Scott Pitts
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides 300.1
H17215-1	NW 13' BGL					✓					✓		4-7-09	1130	✓
-2	NW 11' BGL					✓					✓		✓	✓	✓
-3	NE 13' "					✓					✓		✓	✓	✓
-4	NE 11' "					✓					✓		✓	✓	✓
-5	SW 13' BGL					✓					✓		✓	✓	✓
-6	SW 11' "					✓					✓		✓	✓	✓
-7	SE 13' BGL					✓					✓		✓	✓	✓
-8	SE 11' BGL					✓					✓		✓	✓	✓
-9	middle 13' BGL					✓					✓		✓	✓	✓
-10	middle 13' "					✓					✓		✓	✓	✓
-11	middle 11' "					✓					✓		✓	✓	✓

Sampler Relinquished:	Scott Pitts	Date: 4-8-09 Time: 4:00	Received By: Steven Bentle Cont'llo
Relinquished By:		Date: 4-9-09 Time: 8:15	Received By: Misty LeBut
Delivered By: (Circle One)	Sampler - UPS - Bus - Other:	Temp.	Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials)	MCBB		

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Scott Pitts

From: Bratcher, Mike, EMNRD [mike.bratcher@state.nm.us]
Sent: Friday, May 01, 2009 12:00 PM
To: Scott Pitts
Subject: RE: Tombstone BMB St. #1

This pit site is approved for closure. Please be advised that OCD approval does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, this approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Sincerely,

Mike Bratcher
NMOCD District 2

From: Scott Pitts [mailto:ScottP@yatespetroleum.com]
Sent: Friday, May 01, 2009 9:55 AM
To: Bratcher, Mike, EMNRD
Subject: Tombstone BMB St. #1

5-1-09

Mr. Bratcher,
As per our conversation this morning, this pit has some areas of elevated chlorides. After studying the geologic map's and water quality survey's we believe these levels are naturally occurring. All the information studied will be part of my final closure report as supporting documents. With this said I would like to request permission to backfill and complete this closure.

Tombstone BMB St. #1

Thank you
Scott Pitts
Construction Supervisor
Yates Petroleum Corp.

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 29E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

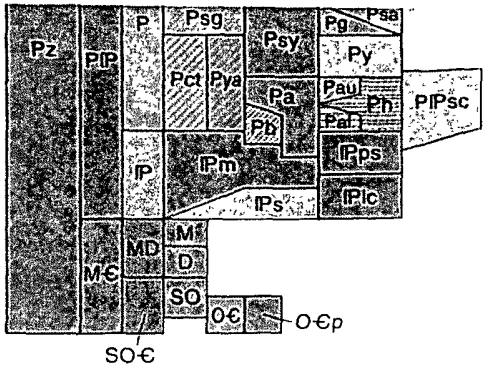
POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

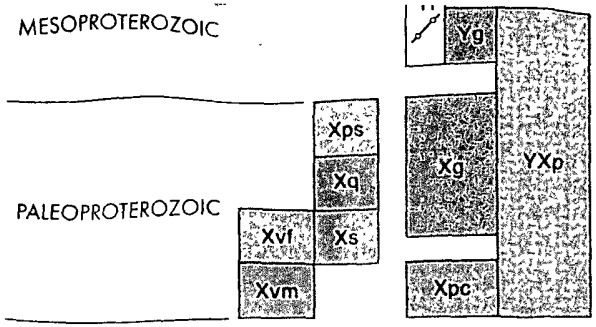
Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 04/29/2009

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
C	25S	29E	06				1	40	40	40
C	25S	29E	15				1	60	60	60
C	25S	29E	30				1	30	30	30
RA	25S	29E	10				1	40	40	40

Record Count: 4





PALEOZOIC

Pz **Paleozoic rocks, undivided**

P **Permian rocks, undivided**

Pqm **Quartermaster Formation** (Upper Permian)—Red sandstone and siltstone

Pqr **Quartermaster and Rustler Formations** (Upper Permian)

Pr **Rustler Formation** (Upper Permian)—Siltstone, gypsum, sandstone, and dolomite

Psl **Salado Formation** (Upper Permian)—Evaporite sequence, dominantly *halite*

Pc **Castile Formation** (Upper Permian)—Dominantly *anhydrite* sequence

Pat **Artesia Group** (Guadalupian)—Shelf facies forming broad south-southeast trending outcrop from Glorieta to Artesia area; includes Tansill, Yates, Seven Rivers, Queen and Grayburg Formations (Guadalupian). May locally include Moenkopi Formation (Triassic) at top

Pty **Tansill and Yates Formations** (Guadalupian)—Sandstone, siltstone, limestone, dolomite, and anhydrite

Psr **Seven Rivers Formation** (Guadalupian)—Gypsum, anhydrite, salt, *dolomite, and siltstone*

Pqg **Queen and Grayburg Formations** (Guadalupian)—Sandstone, gypsum, anhydrite, dolomite, and red mudstone

Pcp **Capitan Formation** (Guadalupian)—Limestone (reef facies)

Pbc **Bell Canyon Formation** (Guadalupian)—Basin facies—sandstone, limestone, and shale

Pcc **Cherry Canyon Formation** (Guadalupian)—Basin facies—sandstone, *limestone, and shale*

PROTEROZOIC

Zi **Neoproterozoic mafic dikes**—Exposed in Taos Range

Yi **Mesoproterozoic mafic dikes, diabase, metadiabase, metadiorite**—Mainly in Burro Mountains; age not well constrained

Ys **Mesoproterozoic sedimentary rocks**—Exposed in Sacramento Mountains, present in subsurface in southeastern New Mexico as De Baca Group

Yg **Mesoproterozoic granitic plutonic rocks**—Mainly 1.45-1.35 Ga megacrystic granites, generally weakly foliated except locally at their margins

YXp ***Mesoproterozoic and Paleoproterozoic plutonic rocks, undivided***

Xg **Paleoproterozoic granitic plutonic rocks**—Variably foliated granites and granitic gneisses; 1.71-1.65 Ga in northern New Mexico; 1.66-1.65 Ga in central and southern New Mexico

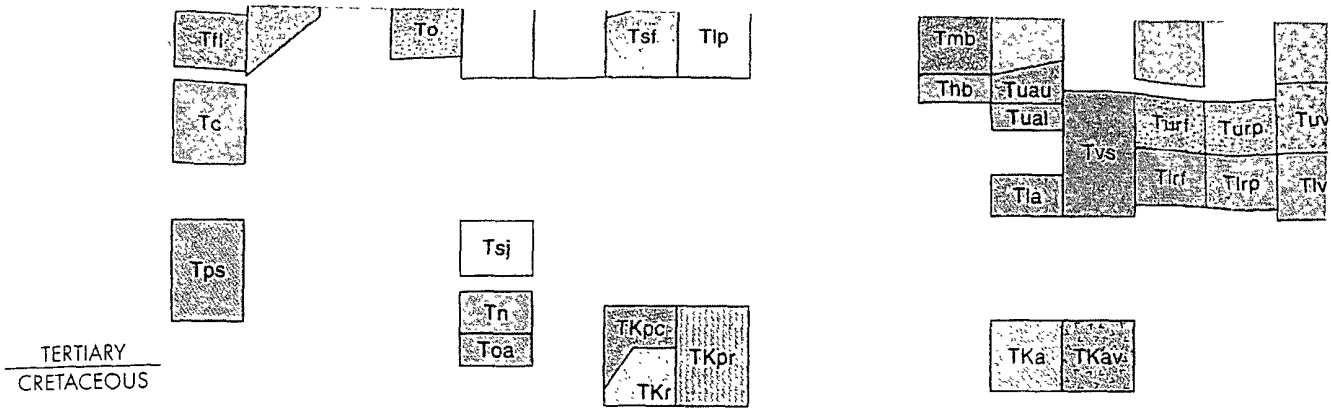
Xps **Paleoproterozoic pelitic schist**—Includes Rinconada Formation in northern New Mexico and Blue Springs Schist in Manzano Mountains

Xq **Paleoproterozoic quartzite**—Includes ~1.70 Ga Ortega Quartzite and equivalents in northern New Mexico and ~1.67 Ga quartzites in central New Mexico

Xs ***Paleoproterozoic metasedimentary rocks***—*Pelitic schist, quartz-muscovite* schist, immature quartzite, and subordinate amphibolite; includes parts of Vadito Group in northern New Mexico, immature metasedimentary rocks of central New Mexico, and Bullard Peak Series mixed supracrustal rocks in Burro Mountains

Xvf **Paleoproterozoic rhyolite and felsic volcanic schist**—Includes 1.70 Ga Vadito Group in northern New Mexico and ~1.68 Ga Sevilleta Metarhyolite in central New Mexico

Xpc **Paleoproterozoic calc-alkaline plutonic rocks**—Granodiorite, diorite, and gabbro complexes, 1.78-1.71 Ga; interpreted to be *intrusive part* of juvenile volcanic arc basement



DESCRIPTION OF MAP UNITS

QUATERNARY

Qa **Alluvium** (Holocene to upper Pleistocene)

Ql **Landslide deposits and colluvium** (Holocene to Pleistocene)—Landslide deposits on western flanks of Socorro Mountains not shown for clarity

Qpl **Lacustrine and playa deposits** (Holocene)—Includes associated alluvial and eolian deposits of major lake basins

Qp **Piedmont alluvial deposits** (Holocene to lower Pleistocene)—Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans May locally include uppermost Pliocene deposits

Qe **Eolian deposits** (Holocene to middle Pleistocene)

Qeg **Gypsiferous eolian deposits** (Holocene to middle Pleistocene)

Qep **Eolian and piedmont deposits** (Holocene to middle Pleistocene)—Interlayed eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits

Qd **Glacial deposits; till and outwash** (upper to middle Pleistocene)

Qoa **Older alluvial deposits of upland plains and piedmont areas, and calcic soils and eolian cover sediments of High Plains region** (middle to lower Pleistocene)—Includes scattered lacustrine, playa, and alluvial deposits of the Tahoka, Double Tanks, Tule, Blackwater Draw, and Gatuña Formations, the latter of which may be Pliocene at base; outcrops, however, are basically of Quaternary deposits

Qb **Basaltic to andesitic lava flows** (Holocene to middle Pleistocene)—Flows south of Grants and west of Carrizozo are Holocene Includes minor vent deposits

Qv **Basaltic tephra and lavas near vents** (upper to middle Pleistocene)—Tuff rings, maars, cinder cones, and minor proximal lavas. Includes maars at Kilbourne Hole and Zuni Salt Lake

Qbo **Basaltic to andesitic lava flows** (middle to lower Pleistocene)—Includes vent deposits

Qvr **Ring-fracture rhyolite lava domes of the Valles caldera** (uppermost to lower Pleistocene)—Upper members of the Valles Rhyolite in Jemez Mountains. Includes 60-ka Banco Bonito and El Cajete Members on south margin of caldera

Qr **Older rhyolite lavas and early volcaniclastic sedimentary fill deposits of the Valles caldera** (lower Pleistocene)—Units are associated with resurgent doming or predate doming of the caldera core. Includes minor middle Pleistocene tuffs of the upper Valles Rhyolite on north side of caldera

Bandelier Tuff (lower Pleistocene)—Includes large blocks of older andesite

Tuau **Upper middle Tertiary basaltic Group** (lower Miocene and up Bearwallow Mountain Ande Mountain, also near vent ba Chuska Mountains

Tual **Lower-upper middle Tertiary Mogollon Group** (upper Olig Basaltic Andesite, Uvas Basaltic and Twin Peaks, Squirrel Spring Springs Basalt, flows of Gila Fl Formation, and the Alum Mountai caldera are dominantly silicic lavas are a minor component

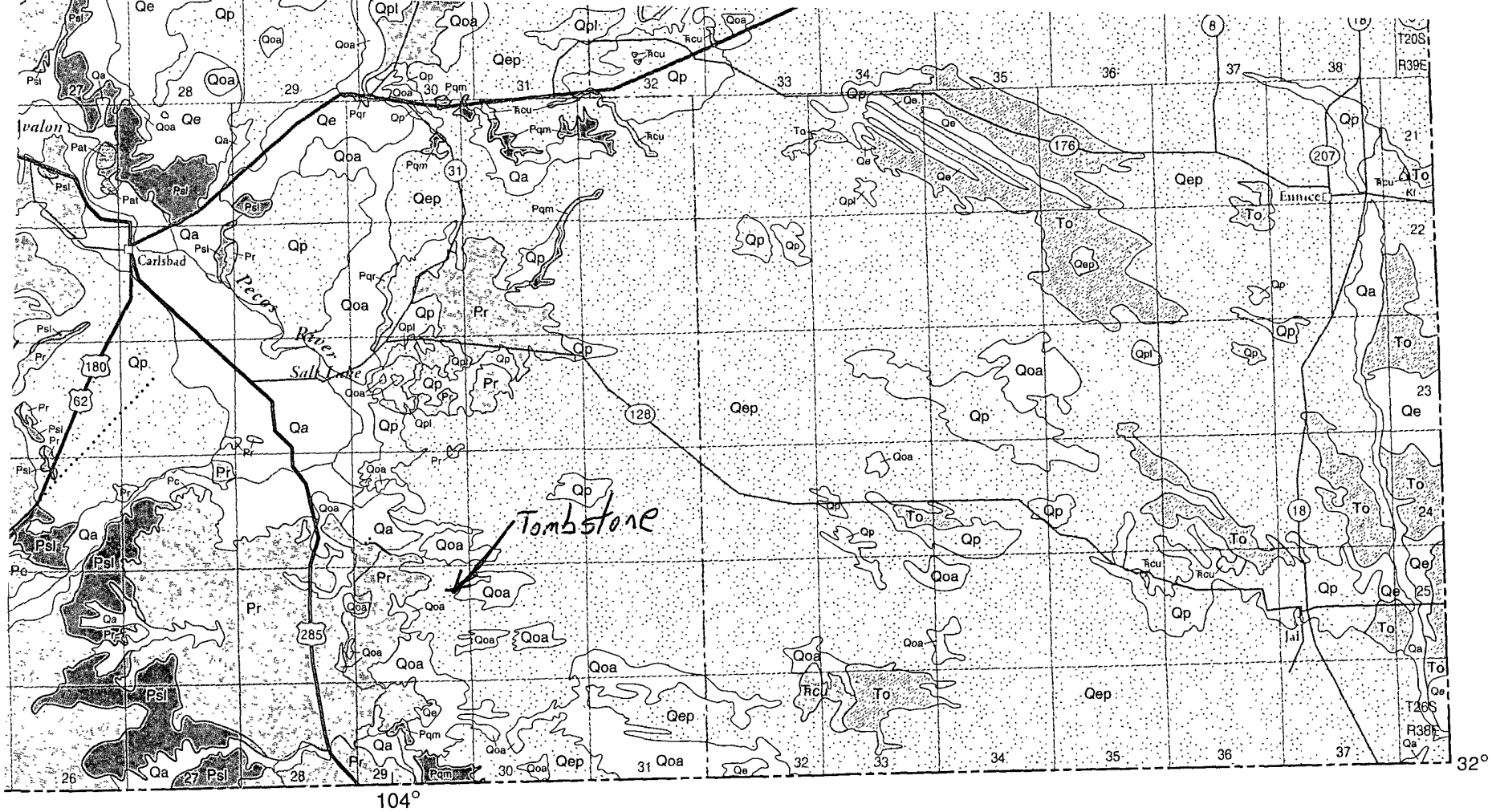
Tvs **Middle Tertiary volcaniclast** Eocene)- Mostly syneruptive units dominantly derived from composition. Locally includes and intertongued with Mogo Top Formation, South Crosby units near Quemado. Older Group tuffs, Tlrp) include Palm Creek Formations and lower Windmill, Chavez Canyon, a

Turf **Upper middle Tertiary rhyoli** 24-29 Ma)—Includes Taylor C Canyon, rhyolite of Hardy Ridge and Sawmill Canyon formation

Tlrf **Lower middle Tertiary rhyolit** upper Eocene, 36-31 Ma)— Cedar Hills, and other units in t

Turp **Upper middle Tertiary rhyolit ash-flow tuffs** (upper Oligocen the La Jencia, Vicks Peak, Lemit Peak, Davis Canyon, Park, Rhyo the tuffs of Horseshoe Canyo Canyon, Turkey Springs, and Formation. Includes some locall units; includes minor volcaniclas

Tlrp **Lower middle Tertiary rhyol Group, ash-flow tuffs** (lower Regional ash-flow tuffs include Datil Well, Lebya Well, Rock H Creek, Bluff Creek, Gillespie, t the tuffs of Steins Mountain, Bl Ranch, tuffs of the Organ caul Includes some locally eruptec includes minor volcaniclastic se sheets



v Mexico

Geologic Map Of New Mexico

ɔurces

NM WAIDS

DATA MAPS HOME SCALE CORROSION

Water Samples for Township 25 South Range 29 East

Instructions:

The number represents the number of water samples of certain well. Click the number if you want to download the data.

3 records are available.

	# of samples	S	T	R	Formation	Date	Chlorides (mg/L)	Location (qtr/qtr)
☐	1 sample	32	25S	29E	RSLR	4/4/1985	3900	25S.29E.32.21111
☐	1 sample	32	25S	29E	RSLR	8/4/1987	4026	25S.29E.32.21111
☐	1 sample	32	25S	29E	RSLR	5/5/1992	5080	25S.29E.32.21111

☐ SELECT/DESELECT ALL

Submit

New Mexico Tech PRRC

RESERVE PIT INSPECTION LOG
Tombstone BMB State#1
S12-T25S-R29E
Eddy Co., NM

DATE:	VISUAL INSPECTION BY:	HOLE SIZE:	DEPTH	PIT LEVEL READING (outside Inside)	FLUID ADDITIONS	MINIMUM 2' FREEBOARD YES	NO	COMMENTS
8-1	Walter Marler			5-6 3-11	0	X		
8-2	Walter Marler			5-6 3-10	0	X		
8-3	Walter Marler			5-5 3-9	0	X		
8-4	Walter Marler			5-5 3-8	0	X		
8-5	Walter Marler			5-5 3-7	0	X		
8-6	Walter Marler			5-5 3-7	0	X		
8-7	Scott Johnson			5-5 3-6	0	X		
8-8	Scott Johnson			5-5 3-6	0	X		
8-9	Walter Marler			5-4 3-5	0	X		
8-10	WALTER MARLER			5-4 3-5	0	X		
8-11	Walter Marler			5-3 3-3	0	X		
8-12	Walter Marler			5-3 3-3	0	X		
8-13	Walter Marler			5-2 3-3	0	X		
8-14	Walter Marler			50 3-3	0	X		
8-15	Walter Marler			5-0 3-3	0	X		

RESERVE PIT INSPECTION LOG
Tombstone BMB State#1
S12-T25S-R29E
Eddy Co., NM

DATE:	VISUAL INSPECTION BY:	HOLE SIZE:	DEPTH	PIT LEVEL READING (outside Inside)	FLUID ADDITIONS	MINIMUM 2' FREEBOARD YES	NO	COMMENTS
7-23	Walter Marler			5-8 3-11	0	X		
7-24	Walter Marler			5-8 3-11	0	X		
7-25	Walter Marler			5-8 3-11	0	X		
7-26	Scott Johnson			5-7 3-11	0	X		
7-27	Scott Johnson			5-7 3-11	0	X		
7-28	Scott Johnson			5-7 3-11	0	X		
7-29	Scott Johnson			5-6 3-11	0	X		
7-30	Walter Marler			5-6 3-11	0	X		
7-31	Walter Marler			5-6 3-11	0	X		