District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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

Form C-144
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

14486

Type of action: ☐ Below grade tank registration
X Permit of a pit or proposed alternative method
☐ Closure of a pit, below-grade tank, or proposed alternative method
☐ Modification to an existing permit/or registration
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, 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: Western Refining Southwest, Inc. OGRID #: 26595
Address: #50 County Road 4990, Bloomfiled, NM 87413
Facility or well name: WDW #2
API Number: 30-045-35747 OCD Permit Number:
U/L or Qtr/Qtr H SE/NE Section 27 Township 29N Range 11W County: San Juan
Center of Proposed Design: Latitude N36.698609 Longitude W107.970351 NAD: ☐1927 X 1983
Surface Owner: ☐ Federal ☐ State X Private ☐ Tribal Trust or Indian Allotment

2.
X **Pit**: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: X Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid X yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness 20 mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
X String-Reinforced
Liner Seams: X Welded ☐ Factory ☐ Other Volume: 18,077 bbl Dimensions: L 145' x W 70 x 10'

3.
☐ **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

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
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
X Alternate. Please specify Plan to utilize existing fencing

6.

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)

7.

Signs: Subsection C of 19.15.17.11 NMAC

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

X Signed in compliance with 19.15.16.8 NMAC

8.

Variances 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:

☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

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

9.

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. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☒ Data obtained from nearby wells	☒ Yes ☐ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ Yes ☐ No ☐ NA
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. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. **(Does not apply to below grade tanks)** - 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. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☒ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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 spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
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 1000 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 spring or a fresh water well used for domestic or stock watering purposes, 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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.
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: _____

11.
Multi-Well Fluid Management Pit 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.

☐ 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
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ 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
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12.
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

13.
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: X Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method: X 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

14.
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 C 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 H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
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 require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 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 25-50 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 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 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, 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 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, 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
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; 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 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

16.
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 E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K 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 19.15.17.13 NMAC
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements 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 H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
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): John C. Thompson Title: Engineer/Agent for Western Refining Southwest Inc.

Signature: Date: 7/7/2016

e-mail address: john@walsheng.net Telephone: 505-327-4892

18.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19.
Closure Report (required within 60 days of closure completion): 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:** _____

20.
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.

21.
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 for private land only)
- ☐ 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 _____ Longitude _____ NAD: ☐1927 ☐ 1983

22.

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	Waste Disposal Well (WDW)	2
[7] OGRID No. 267595	[8] Operator Name Western Refining Southwest, Inc.	[9] Elevation 5535'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	27	29-N	11-W		2028'	NORTH	111'	EAST	SAN JUAN

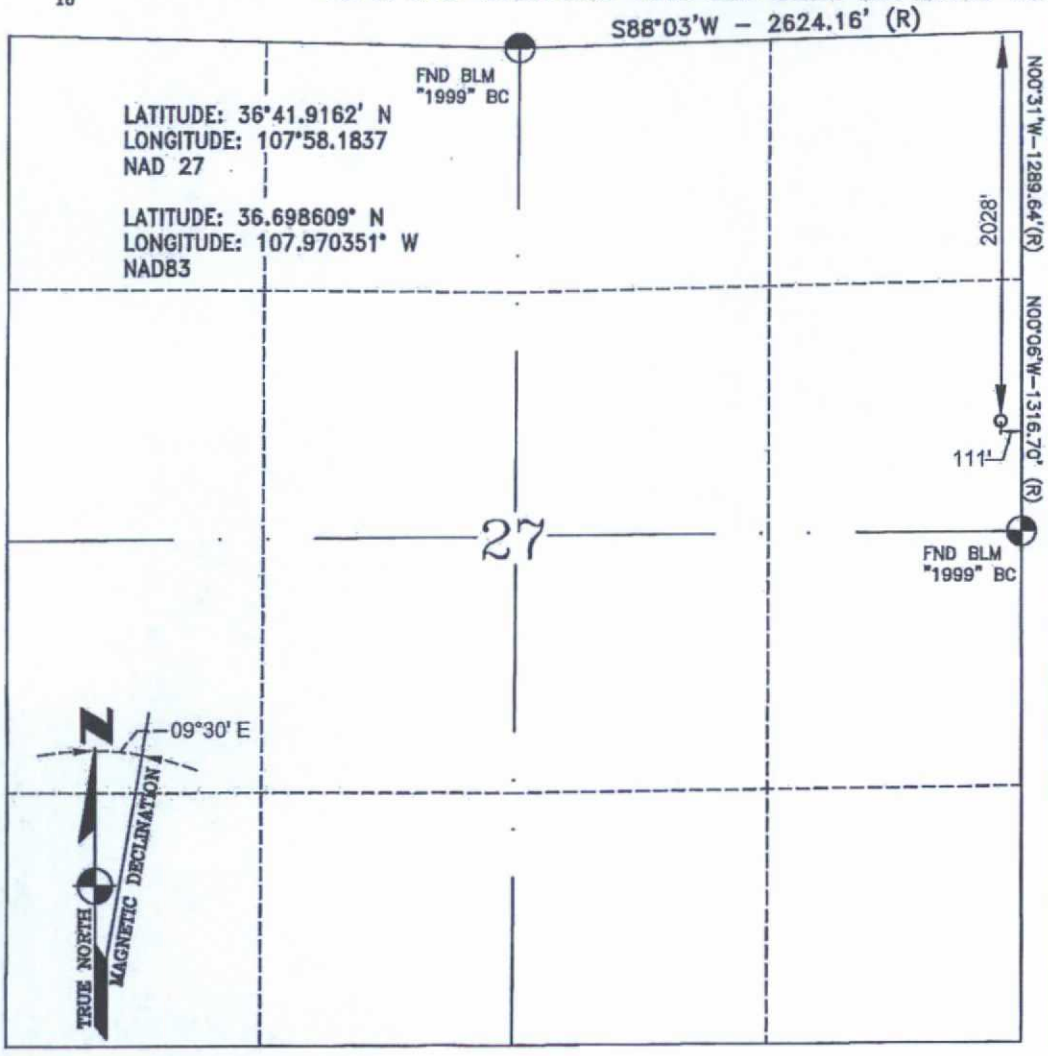
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

12/23/15
Signature Date

John C. Thompson
Printed Name

johnewalsberg.net
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 12, 2015
Date of Survey

Signature and Seal of Professional Surveyor:

GLEN W. RUSSELL NEW MEXICO 15703 LICENSED PROFESSIONAL SURVEYOR

GLEN W. RUSSELL

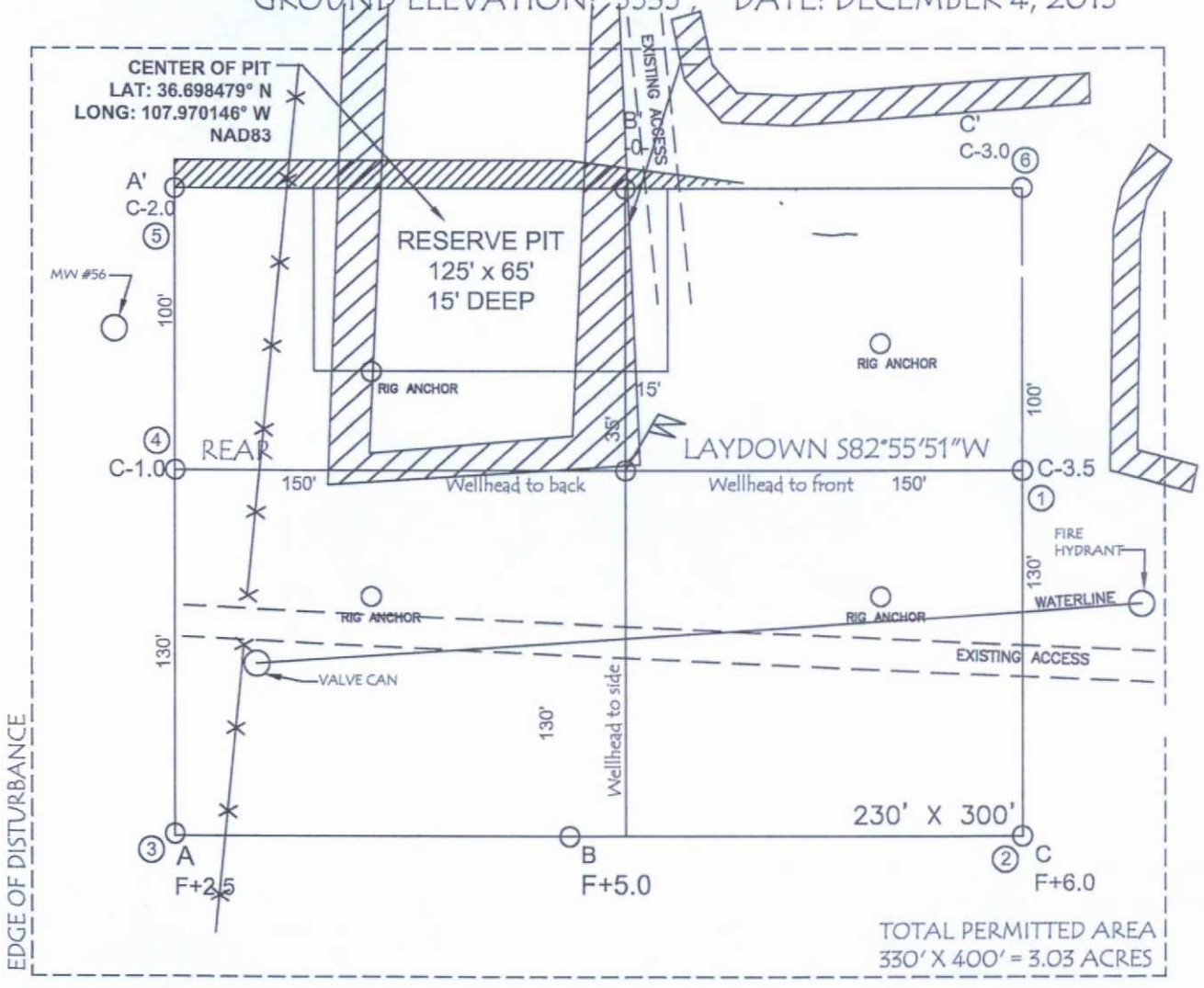
Certificate Number 15703

Western Refining Southwest, Inc.

WDW #2, 2028' FNL & 111' FEL

SECTION 27, T-29-N, R-11-W, NMPM, SAN JUAN COUNTY, NM

GROUND ELEVATION: 5535' DATE: DECEMBER 4, 2015



LATITUDE: 36°41.9162' N
LONGITUDE: 107°58.1837' W
NAD27

LATITUDE: 36.698609° N
LONGITUDE: 107.970351° W
NAD83

NOTES:

1. VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
2. RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).

30' 0 30' 60'

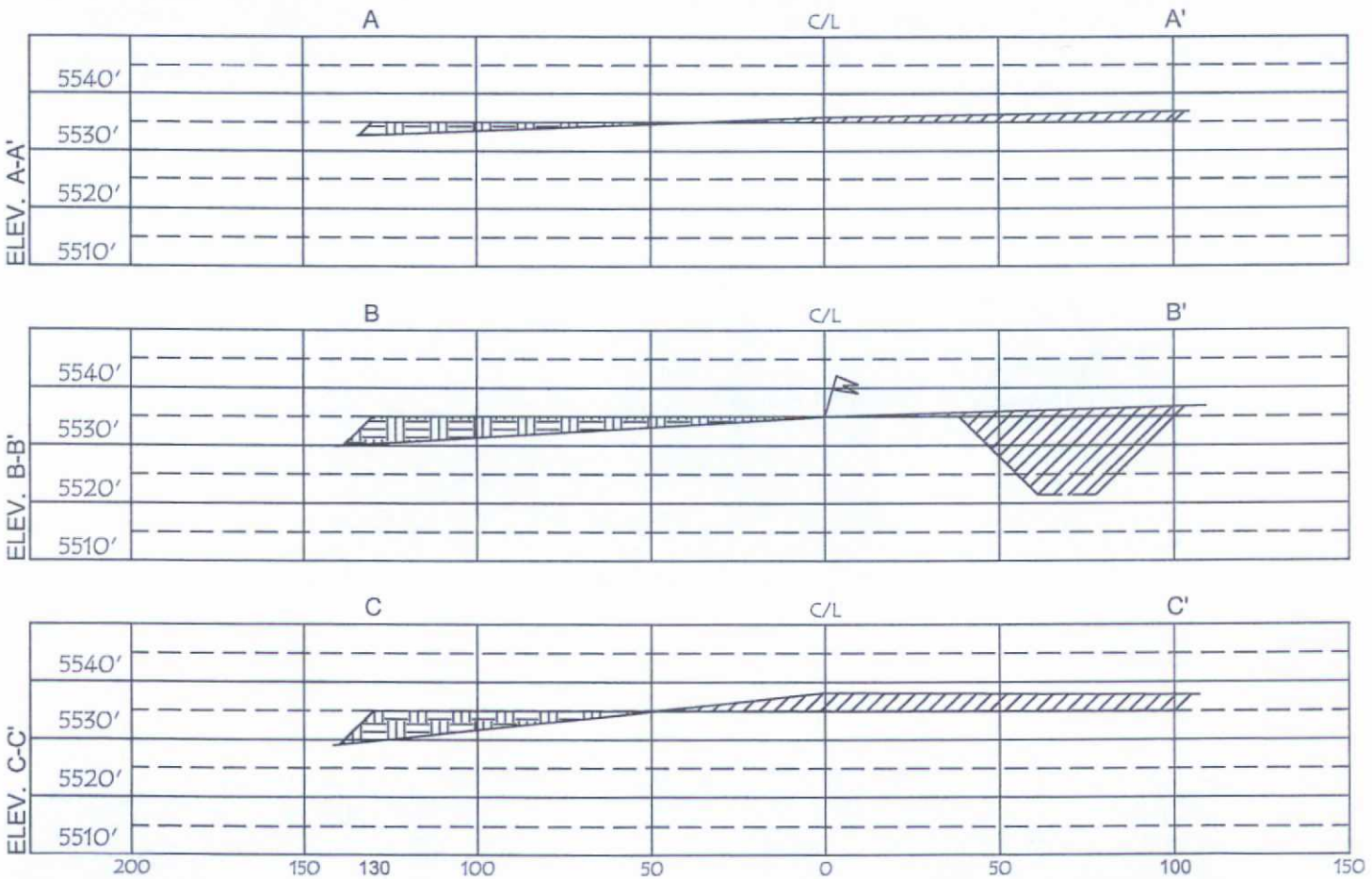
Scale: 1" = 60'

Western Refining Southwest, Inc.

WDW #2, 2028′ FNL & 111′ FEL

SECTION 27, T-29-N, R-11-W, NMPM, SAN JUAN COUNTY, NM

GROUND ELEVATION: 5535′, DATE: DECEMBER 4, 2015



HORIZ. SCALE: 1″ = 50′
VERT. SCALE: 1″ = 30′

NOTE:
VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

Hydro geological report for Western Refining WDW #2

Regional Hydro geological context:

The WWD #2 is located on private surface in San Juan County, New Mexico. The proposed well location will be located within the current Western Refining Southwest Inc., facility on bench that overlooks the San Juan River valley. Being inside the industrial complex there is no vegetation but the surrounding area is mostly in a mixed woodland-scrubland environment. Vegetation includes sparse juniper, sagebrush, rabbit brush, snakeweed, cheat grass, grama grass, galleta grass, clover, and buckwheat. Soils are mostly beebe loamy sand.

A records search of the NM Office of the State Engineer – iWATERS database indicates that the closest know water well is 1046' feet away in Section 27, T29N, R11. The well was drilled to 305 feet and the depth to ground water is listed as 186'. However, Western has 70 shallow monitoring wells located within the terminal to keep track of a thin shallow aquifer that is located on top of the Nacimiento formation (2' – 4' thick). A study of the nearest monitoring wells indicates that the depth to that thin, shallow stringer that contains water is between 25' and 35'.

Geologic maps of the area indicate that the surface formation at the proposed well site is the Nacimiento Formation. The Nacimiento Formation of Tertiary age is a sedimentary rock formation found in the San Juan Basin of northwestern New Mexico and Colorado. It is a heterogeneous nonmarine formation composed of shale, siltstone and sandstone deposited in a flooplain, fluvial and lacustrine settings. The Nacimiento interbeds with the underlying Ojo Alamo Formation but is separated by an unconformity from the overlying San Jose formation.

The Nacimiento Formation was deposited in flooplain, fluvial and lacustrine settings from the San Juan uplift to the north and the Brazos-Sangre de Cristo uplift to the east. In general, the unit consists of an interbedded sequence of interbedded black, carbonaceous mudstones and white, coarse-grained sandstone. Thickness of the Naciemento Formation generally increases from west to south east (418 feet in the west and south east to almost 2,232 feet in the center of the structural basin).

Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modification, namely erosion and structural deformation. Transmissivity data for Nacimiento Formation are minimal. Values ~ 100 feet squared or measured discharge from wells completed in Nacimiento Formation ranges from 16 to 100 gallons. Most of those wells were constructed by El Paso Natural gas in the Canyon Largo area and other Nacimiento water wells in the outcrop areas provide water for livestock and domestic use. The Naciemento Formation is a very suitable unit for recharge from precipitation because soils that form on the unit can be sandy and highly permeable and therefore readily absorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the Nacimiento Formation by the San Juan River and its tributaries all tend to reduce the effective recharge of the unit.

Stone et al, 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70p

Site specific information:

Surface hydrology:	The site is located south of the San Juan River valley and is drained by a number of small intermittent drainages
1st water-bearing formation:	Nacimiento, tertiary
Formation thickness:	505' feet
Underlying formation:	Ojo Alamo, Tertiary
Depth to groundwater:	Greater than 25'.

FEMA Map – 100 year floodplain

The attached FEMA Map indicates that the proposed location is outside of the mapped 100 year floodplain.

Siting Criteria Compliance Demonstrations

The WDW #2 is not located in an unstable area. The location is not over a mine and is not on the side of a hill. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other intermittent watercourse.

Western Refining, Southwest, Inc. (Western)
WDW #2
Pit Design and Construction Plan

In accordance with Rule 19.15.17, the following information describes the design and construction for the temporary pit.

General Plan

1. Western will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment
2. Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration
3. Western will post a well sign, not less than 12" by 24", on the well site prior to construction of the temporary pit. The sign will list the operator on record as the operator, the location of the well by unit letter, section, township range, and emergency telephone numbers (complying with 19.15.16.8 NMAC)
4. Note: location of this proposed temporary drilling pit is located within the refinery premises which is surrounded by a 8 ft high chain linked fence with barbed wire on top. The facility is locked and guarded at all times. This condition may necessitate the need for any additional fencing around the temporary pit. However if required, Western will construct a fence utilizing 48' steel mesh field-fence (hogwire). T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. If required, temporary pits will be fenced at all times excluding drilling or overwork operations, when the front side of the fence will be temporarily removed for operational purposes.
5. Western shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure
6. Western shall construct the pit so that the slopes are no steeper than two horizontal feet to 1 vertical foot
7. Pit walls will be walked down by a crawler type tractor following construction
8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements
9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided
10. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep
11. Western will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. Western will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. Western will minimize the number of field seams in corners and irregularly shaped areas
12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system
13. The pit shall be protected from run-on by constructing and maintaining diversion ditched around the location or around the perimeter of the pit in some cases
14. The volume of the pit shall not exceed **18,077 bbls**, including freeboard

15 If needed, temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit
16 The lower half of the blow pit (nearest lined pit) will be lined with the same 20 mil liner. The upper half of the blow pit will remain unlined as allowed in Rule 19.15.17.11. F (11)
17 Western Refinery will not allow freestanding liquids to remain on the unlined portion of temporary blow pit

Western Refining, Southwest Inc. (Western)
WDW #2
Maintenance and Operating Plan

In accordance with Rule 19 15 17.12 the following information describes the operation and maintenance of the temporary pit.

General Plan

1 Western will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment
2 Western will conserve drilling fluids by either recycling, reusing or disposing in a manner approved by division rules and that prevents contamination to fresh water and protects public health and the environment. Drilling fluids will be disposed at either IEI or Envirotech Land Farm/Disposal, Permit # NM-01-010B & #NM-01-0011 respectively.
3 Western will not discharge or store any hazardous waste in any temporary pit
4 If any pit liner's integrity is compromised or if any penetration of the liner occurs above the liquid's surface, then Western shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner
5 If a leak develops below the liquid's level or if any penetration of the pit liner occurs below the liquids's surface, Western shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. Western shall notify the Aztec Division office pursuant to 19.15.29.NMAC.
6 The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or manifold system
7 The pit shall be protected from run-on by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases
8 Western shall immediately remove any visible layer or oil from the surface of temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be stored on-site until closure of pit
9 Only fluids generated during the drilling or workover process may be discharged into a temporary pit
10 Western will maintain the temporary pit free of miscellaneous solid waste or debris
11 During drilling or workover operations, Western will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the IADC reports and company morning reports. Western will file this log with the Aztec Division office upon closure of the pit
12 After drilling or workover operations, Western will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at Western electronically and will be filed with the Aztec Division office upon closure of the pit
13 Western shall maintain at least two feet of freeboard for a temporary pit
14 Western shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling or workover rig

Western Refining, Southwest Inc. (Western)
WDW #2
Closure Plan

In accordance with Rule 19.15.17.9 NMAC and 19.15.17.13 NMAC the following information describes the closure requirements of the temporary pits.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of the pit closure. Closure report will be filed on C-144 and incorporated the following:

- Detail on Capping and Covering, where applicable
- Plot Plan (Pit diagram)
- Inspection reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

General Plan

1. All free standing liquids will be allowed to evaporate or will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves
2. The preferred method of closure for all temporary pits will to remove all of the contents of the reserve pit including the liner, pursuant to Subsection B of 19.15.17.13.C(1)
3. Prior to closure, the surface owner shall (which in this case is the same as the operator) be notified at least 72 hrs but not more than one week prior to Western Refinery's proposed closure plan using a means that provides proof of notice i.e., certified mail, return receipt requested.
4. Within 6 months of the Rig Off status occurring Western will ensure that temporary pits are closed and re-contoured to match the pre-drilling condition of the area.
5. Notice of Closure will be given to the Aztec Division office 72 hours but not more than one week of closure via email, or verbally, The notification of closure will include the following:
    i. Operator's name
    ii. Location by Unit Letter, Section, Township, and Range. Well name and API Number
6. All contents, including synthetic pit liners, will be removed and hauled to an approved landfarm and or landfill in San Juan County.
7. Once of all the pit contents and liner have been removed a five point composite sample will be taken of the soil beneath the reserve pit using sampling tools and all samples tested per 19.15.17.13 (C). The concentration of any contaminant in the stabilized soil cannot be higher than the parameters listed in Table I of 19.15.17.13 NMAC (see below). In the event that the criteria are not met, Western will contact the NMOCD Aztec office and obtain approval before continuing with any pit closure operations as per 19.15.17.13.C.3.(B).

Table I of 19.15.17.13:

Components	***Tests Method***	***Limit (mg/Kg)***
Benzene	EPA SW-846 8021B or 8015M	10
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.1	600

8 Upon completion of pit content removal and testing, the pit area will be backfilled with the original earthen material that was excavated to build the reserve pit. The cover shall include one foot of suitable material (with chloride concentrations less than 600 mg/Kg) to establish vegetation at the site, or the background thickness of topsoil, whichever is greater

9 Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape

10 Because the temporary pit is located within the active portion of the refinery the area will not be re-seeded.

11 Because the contents of the pit will be removed no marker indicating the location of the pit will be required.

Western Refining Southwest, Inc.
WDW #2
Temporary Drilling Reserve Pit Application
Siting Criteria

1. According to the iWaters Database from the State Engineers Office, the closest know water well is 1046' feet away from the proposed WDW #2 location in Section 27, T29N, R11W. The depth of the well is listed as 305'. Western also has monitoring wells for an ongoing remediation project located within the terminal grounds and the info for the closest monitoring well (MW 52) are included (log and information regarding depth to water). See attached printouts.

2. As shown on the attached topographic map and aerial photos, there are no continuously flowing watercourses within 300' of the well, or any significant watercourses, lakebeds, sinkholes, or playa lakes within 200' of the well. Note: the aerial photos shows a man-made retention ponds that Western uses to store waste water which is waiting to be disposed.

3. There are no permanent residences, schools, hospitals, institutions, churches within 300' of the well.

4. There are no domestic water wells or springs within 500' of the well. See iWaters Database printout.

5. The well is not located within any municipal boundaries.

6. The well is not within 500' of any wetlands. See attached topographic map and aerial photos.

7. There are no subsurface mines in Section 27 T29N, R11W. See attached map from the NM EMNRD Mining and Mineral Division.

8. The WDW #2 is not located in an "unstable" area. The location is not over a mine and is not on the side of a hill. The location of the excavated pit material will not be located within 300' of a continuously flowing watercourse or 200' from any other watercourse.

9. The well is not located in a 100-year floodplain as visible on the topographic map and the FEMA Flood Insurance Rate Map.

10. Regardless of the pit content sample results, all of the contents of the reserve pit including the liner will be hauled to an approved land farm located within San Juan County, either at the IEI Land Farm (NMOCD Permit #NM 01-010B) or Envirotech Land Farm (NMOCD Permit #NM 01-0011).

RPS

WELL CONSTRUCTION

Well No.: MW-52 (SWMU8-6A)
Start Date: 10/13/2008
Finish Date: 10/14/2008

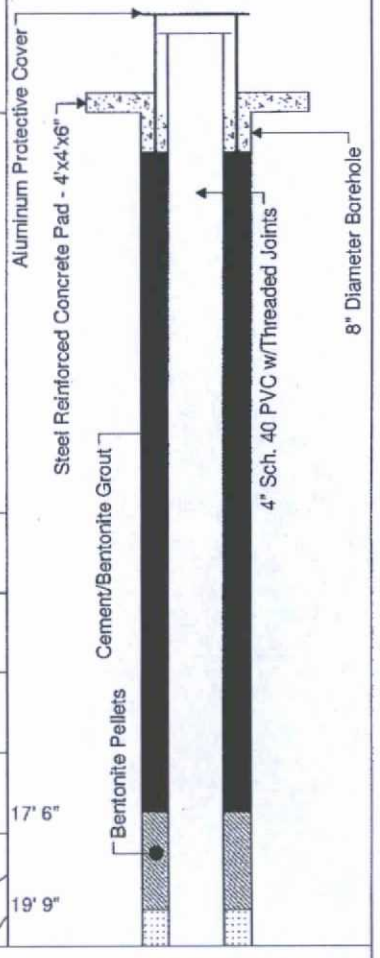
Client: Western Refining Southwest, Inc.
Site: SWMU Group #2, Bloomfield Refinery
Job No.: 354 - Bloomfield, NM
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger/ODEX
Sampling Method: Split Spoon

Total Depth: 41' bgl
Ground Water: 36.03' BTOC 10/28/08
Elev., TOC (ft. msl): 5538.626
Elev., PAD (ft. msl): 5536.148
Elev., GL (ft. msl): 5535.908
Site Coordinates:
N 49828.227 **E** 52839.886

Comments: 0-10 Interval (10/13/08, 40ºF); 10-41 Interval (10/14/08, 40ºF-42ºF). SWMU8-6A is 42'W 10ºS of SWMU8-6.

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/Container/No	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0							--	**Silt (ML)** Fine grain, loose, dry, brown
10					0.3		80	**Silt (ML)** Fine grain, loose, dry to damp, brown
12					0.4		100	**Silt (ML)** Similar to above
14					0.5		100	**Silt (ML)** Similar to above
16					0.4		100	**Silt (ML)** Similar to above
18					0.5		100	**Silt (ML)** Similar to above
20								**Clayey Silt/Silty Clay (ML/CL)** Low plasticity, soft, damp, brown

Completion Results



RPS
3833 S. Staples, Suite N-229
Corpus Christi, Texas 78411

361/855-7335
361/855-7410 fax

RPS

WELL CONSTRUCTION

Well No.: MW-52 (SWMU8-6A)

Client: Western Refining Southwest, Inc.
Site: SWMU Group #2, Bloomfield Refinery
Job No.: 354 - Bloomfield, NM
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger/ODEX
Sampling Method: Split Spoon

Total Depth: 41' bgl
Ground Water: 36.03' BTOC 10/28/08
Elev., TOC (ft. msl): 5538.626
Elev., PAD (ft. msl): 5536.148
Elev., GL (ft. msl): 5535.908
Site Coordinates:
N 49828.227 **E** 52839.886

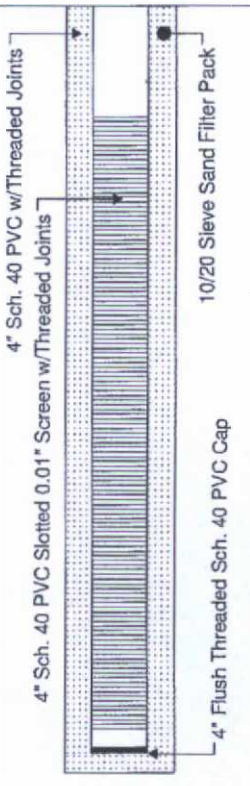
Start Date: 10/13/2008
Finish Date: 10/14/2008

Comments: 0-10 Interval (10/13/08, 40ºF); 10-41 Interval (10/14/08, 40ºF-42ºF). SWMU8-6A is 42'W 10ºS of SWMU8-6.

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/Container/No	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
					0.4		100	**Clayey Silt/Silty Clay (ML)** Similar to above
22					0.5		100	**Clayey Silt/Silt (ML)** Similar to above, except decrease in clay content
24					0.4		60	**Clayey Silt/Silt (ML)** Similar to above
26					0.5		70	**Gravelly Sand (SW)** Fine grain, loose, damp, brown, gravel throughout
28					0.4		70	**Gravelly Sand (SW)** Similar to above
30					0.5		70	**Gravelly Sand (SW)** Similar to above
32					0.5		60	**Gravelly Sand (SW)** Similar to above, moist to saturated at base
34	33'-34'	0915	G/2V/2E/3J	34'			60	**Gravelly Sand (SW)** Fine to medium grain, loose to compact, saturated, brown
36							60	**Gravelly Sand (SW)** Similar to above, trace sandstone at base, very light reddish brown to tan
38							--	**Sand/Sandstone (SP/SS)** Fine grain, compact, moist to saturated at base, yellowish brown Nacimiento Formation
40							--	
42								**Sand/Sandstone (SP/SS)** Similar to above

Total Depth = 41' BGL

Completion Results



RPS
3833 S. Staples, Suite N-229
Corpus Christi, Texas 78411

361/855-7335
361/855-7410 fax

Western Refinery

WDW #2

Additional Depth to GW information

Well ID	Date	Measuring Point Elevation *(ft amsl)*	Total Well Depth *(ft below TOC)*	Depth To Product *(ft below TOC)*	Depth To Water *(ft below TOC)*	Corrected Groundwater Elevation *(ft amsl)*	SPH Thickness *(ft)*
MW-52	04/15/16	5538.63	41.69	NPP	36.19	5502.44	NPP
	08/13/15	5538.63	41.00	NPP	36.00	5502.63	NPP
	04/20/15	5538.63	41.00	NPP	36.05	5502.58	NPP
	08/18/14	5538.63	41.00	NPP	36.31	5502.32	NPP
	04/02/14	5538.63	41.00	NPP	36.69	5501.94	NPP
	08/05/13	5538.63	41.00	NPP	36.47	5502.16	NPP
	04/08/13	5538.63	41.00	NPP	36.41	5502.22	NPP
	08/06/12	5538.63	41.00	NPP	36.28	5502.35	NPP
	04/02/12	5538.63	41.00	NPP	36.50	5502.13	NPP

New Mexico Office of the State Engineer
Wells with Well Log Information

:LW##### in the) suffix indicates POD has been aced & no longer 'es a water right

(R=POD has been replaced, O=orphaned, C=the file is closed)

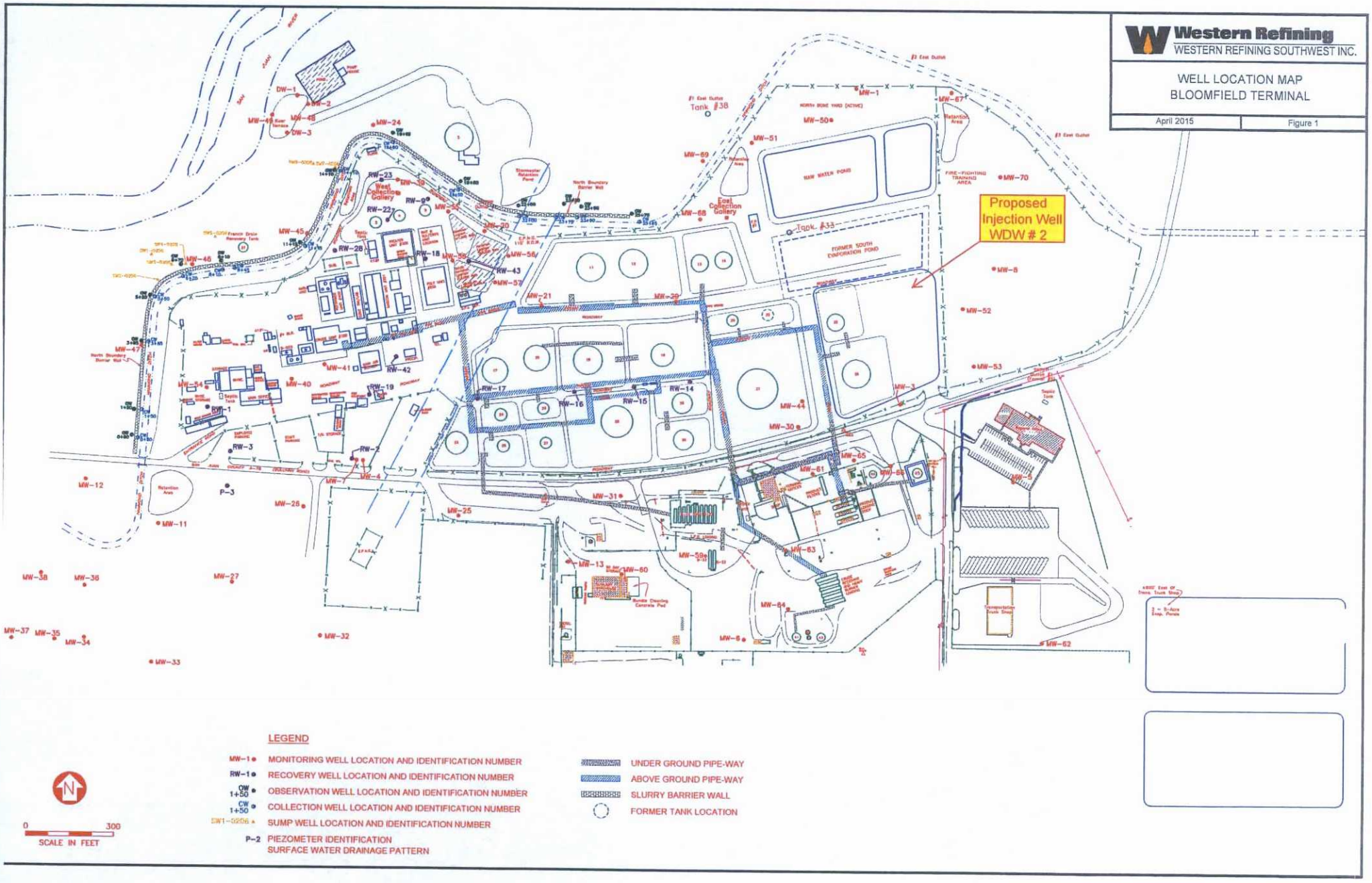
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

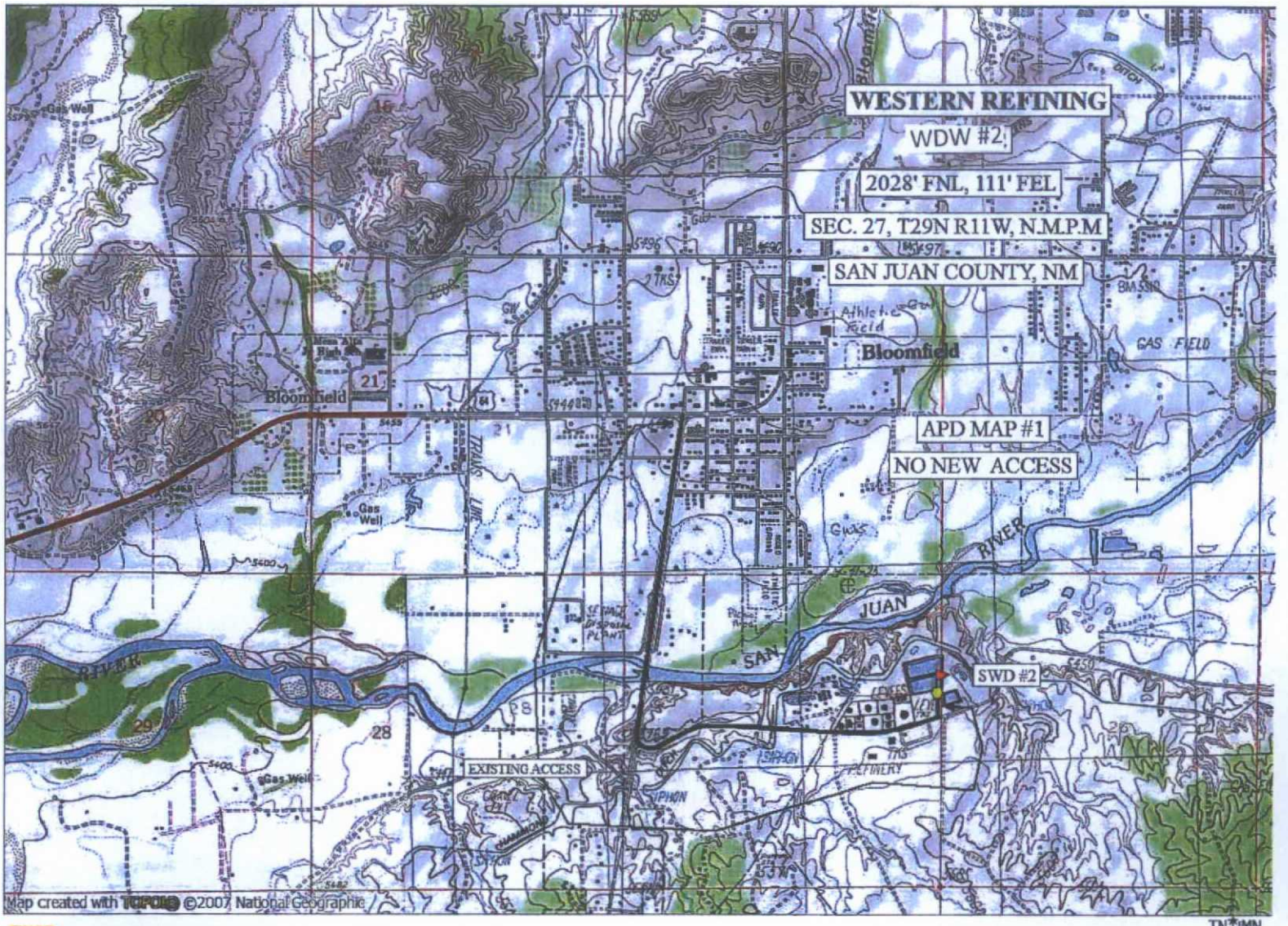
) Number	POD Sub-Code	basin	County	Source	q 6416	q 4	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
1808 0-3			SJ	Shallow	4	4	2	27	29N	11W	234561	4065483*	0	02/08/1984	02/09/1984	09/21/1984	39	34		5
1808 0-1			SJ	Shallow	2	4	2	27	29N	11W	234561	4065683*	200	02/08/1984	02/08/1984	09/21/1984	25	17		583
1808 0-2			SJ	Shallow	3	4	2	27	29N	11W	234361	4065483*	200	02/07/1984	02/08/1984	09/21/1984	27	19		583
1808 0-5			SJ	Shallow	1	1	3	26	29N	11W	234753	4065274*	283	02/06/1984	02/06/1984	09/21/1984	52	43		583
1808 0-6			SJ	Shallow	1	2	4	27	29N	11W	234347	4065283*	292	02/07/1984	02/07/1984	09/21/1984	50			583
2148			SJ	Shallow		2	4	27	29N	11W	234448	4065184*	319	10/20/1987	11/16/1987	11/19/1987	305	186	SAVAGE, BOB	847
1808 0-4			SJ	Shallow	3	3	2	27	29N	11W	233956	4065491*	605	02/09/1984	02/09/1984	09/21/1984	32	25		583
1974			SJ	Shallow	3	3	4	22	29N	11W	233984	4066267*	973	06/21/1985	06/24/1985	07/22/1985	47	11	RAY, BRADLY C.	1084
0696			SJ	Shallow		3	4	22	29N	11W	234085	4066368*	1004	06/27/1978	07/01/1978	07/03/1978	34	12	W.J.HOOD	717
3286			SJ	Shallow	1	3	3	23	29N	11W	234784	4066470*	1011	01/03/2003	01/07/2003	01/14/2003	38	28	WILLIAM HARGIS	150R
3935 POD1			SJ	Shallow	4	2	4	22	29N	11W	234693	4066639	1163	11/15/2010	11/16/2010	11/30/2010	30	10	TERRY HOOD	7..
3049			SJ	Shallow	4	2	4	22	29N	11W	234596	4066669*	1186	04/13/2001	04/14/2001	04/23/2001	33	10	THOMPSON, LEON	527
2529			SJ	Shallow	3	2	4	22	29N	11W	234396	4066669*	1197	02/15/1997	02/17/1997	02/20/1997	30	9	HOOD, TERRY	717
3479			SJ	Shallow	3	2	4	22	29N	11W	234396	4066669*	1197	05/21/2004	05/24/2004	06/07/2004	43	4	CHIVERS	809
3934 POD1			SJ	Shallow	4	2	4	22	29N	11W	234658	4066717	1238	11/17/2010	11/18/2010	11/30/2010	30	8	TERRY HOOD	717
2227			SJ	Shallow	4	1	1	27	29N	11W	233359	4065909*	1275	07/08/1989	07/12/1989	07/24/1989	27	6	CHIVERS,BRYCE	809

M location was derived from PLSS - see Help


Western Refining
WESTERN REFINING SOUTHWEST INC.
WELL LOCATION MAP
BLOOMFIELD TERMINAL
April 2015
Figure 1
Proposed Injection Well WDW # 2
Tank #38
Tank #33
RAW WATER POND
FORMER SOUTH EVAPORATION POND
West Collection Gallery
East Collection Gallery
LEGEND
MW-1 MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
RW-1 RECOVERY WELL LOCATION AND IDENTIFICATION NUMBER
OW 1+50 OBSERVATION WELL LOCATION AND IDENTIFICATION NUMBER
CW 1+50 COLLECTION WELL LOCATION AND IDENTIFICATION NUMBER
SW1-0206 SUMP WELL LOCATION AND IDENTIFICATION NUMBER
P-2 PIEZOMETER IDENTIFICATION
SURFACE WATER DRAINAGE PATTERN
UNDER GROUND PIPE-WAY
ABOVE GROUND PIPE-WAY
SLURRY BARRIER WALL
FORMER TANK LOCATION
0 300
SCALE IN FEET

Western Refining Southwest Inc. - WWD #2

Enerdeq Browser Date: Nov 23, 2015 Author: JOHN THOMPSON



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 miles
0.0 0.5 1.0 1.5 km

TN MN
9½°
12/12/15

Active Mines in San Juan County, New Mexico, November 2014

Metals

Coal
Potash
Copper
Gold & Silver
Molybdenum

Industrial Minerals

Calcite
Gemstone
Gypsum
Humate
Perlite
Pumice
Salt
Silica / Flux
Silver Silica
Zeolites

Aggregate & Stone

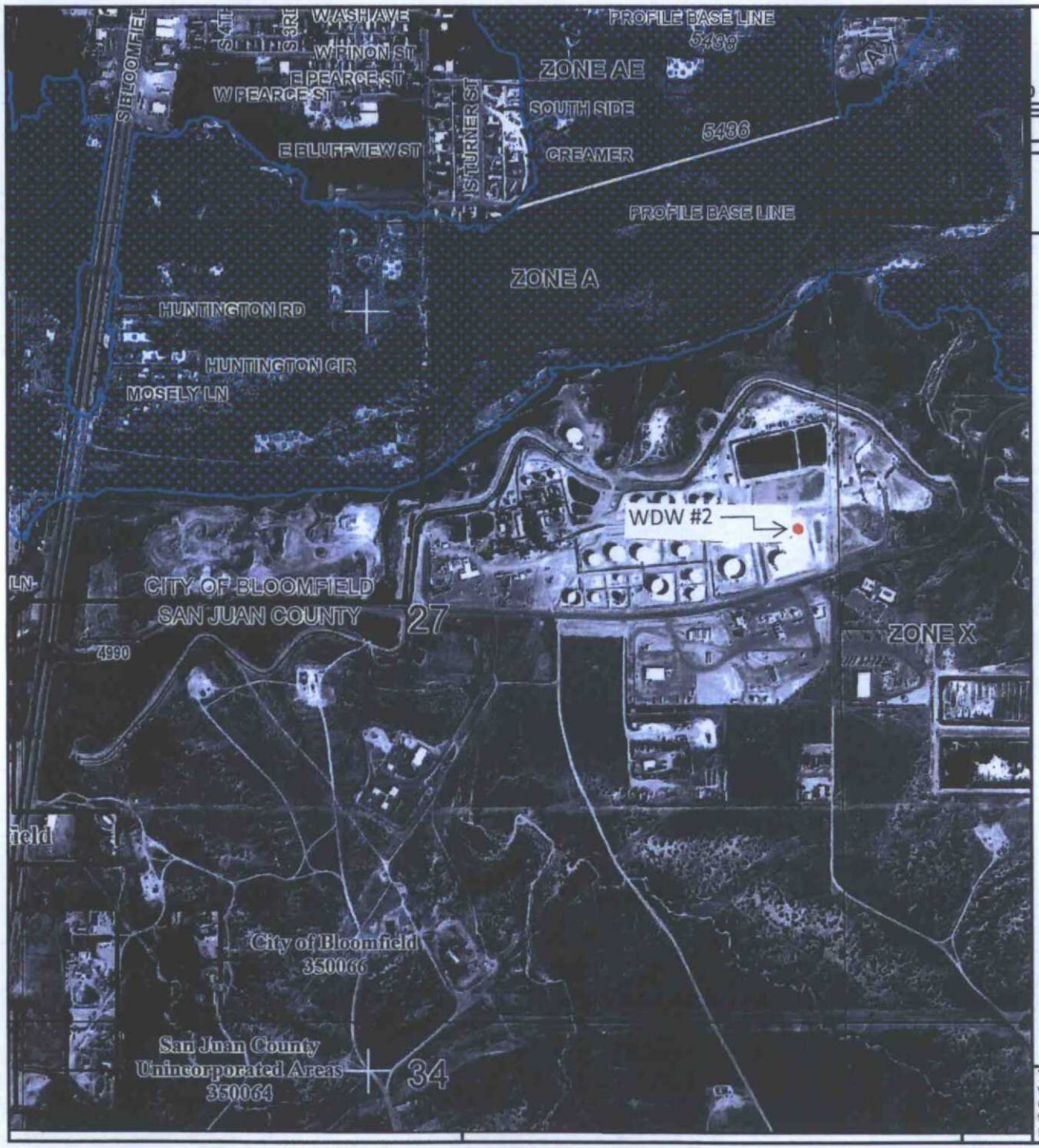
Aggregate
Caliche
Clay & Shale
Dimension & Flagstone
Limestone
Red Dog
Scoria
Travertine

Data: November 2014 database query, Mining & Minerals Division, Mine Registration, Reporting & Safeguarding Program.
Basemap: Esri ArcGIS Online, National Geographic.
Map: Linda S. DeLay, GISP

NAD 83 UTM NM Zone13

N W E S

0 5 10 20 Miles



MAP SCALE 1" = 1000'

0 1000 2000 FEET

0 300 600 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1055F

FIRM

FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY, NEW MEXICO

AND INCORPORATED AREAS

PANEL 1055 OF 2750

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BLOOMFIELD, CITY OF	350066	1055	F
SAN JUAN COUNTY	350064	1055	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
35045C1055F

EFFECTIVE DATE
AUGUST 5, 2010

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

19.15.17.15 Exceptions and Variances.

Western Refining Southwest, Inc. is requesting a variance to the fencing requirements (Subsection D of 19.15.17.11 NMAC). The proposed location and reserve pit are going to be located within an existing and active portion of the terminal which is surrounded by an 8 ft fence with locked gates. The existing fencing and 24 hr security on the refinery grounds will provide better or equal protection of fresh water, public health and the environment.