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.

12197
43-21238

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

Type of action:
- ☐ Below grade tank registration
- ☒ 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: SG INTERESTS I, LTD OGRID #: 20572
Address: P.O. Box 2677 Durango, CO 81301 RCUD SEP 17'14
Facility or well name: Navajo 21-7-24 #4 OIL CONS. DIV.
API Number: 30-043-21238 OCD Permit Number: DIST. 3
U/L or Qtr/Qtr O (SWSE) Section 24 Township 21N Range 7W County: Sandoval
Center of Proposed Design: Latitude 36.03122N Longitude 107.52636W NAD: ☐1927 ☒ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☒ yes ☐ no
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☐ Welded ☒ Factory ☐ Other Volume: 1675 bbl Dimensions: L 65' x W 40' x D 10'

3.
☐ **Below-grade tank:** Subsection I of 19.15.17
Volume: bbl Type of f
Tank Construction material:
☐ Secondary containment with leak detection ☐ verflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

DENIED
No signature, No C-102 + Rig diagram, No variance page and plans under old pit rule
BY: Jonathan Kelly
DATE: 9/18/2014 (505) 334-6178 Ext. 122

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
☒ Alternate. Please specify Pit will be fenced w/ 4' flog wire w/ 2 strands barbed wire on top

20

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

☒ 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: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ 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

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.

OCD Approval: ☐ Permit Application (in CD Conditions (see attachment)

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

Title: _____ **umber:** _____

DENIED

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: _____

HYDROGEOLOGIC DATA for the Navajo 21-7-24 #4

The proposed well, Navajo 21-7-24 #4 , is located in the SWSE quarter/quarter of section 24, T21N, R7W. Ground level elevation at this site is at 6690'. The approximate elevation of the water bearing formation is 6890'. No water wells in this Township were identified using the iWaters Database from the Office of the State Engineers.

There are water wells located in some surrounding townships and are included with the following results:

Location (T, R, Section)	POD Number	Well Depth	Depth to Water	Water Column
21N 07W Sec 07	SJ 01824	100'	n/a	n/a
21N 07W Sec 07	SJ 03562	680'	240'	440'
20N 07W Sec 17	RG 38729	252'	110'	142'
20N 07W Sec 16	SJ 01415	512'	40'	472'
20N 07W Sec 22	SJ01416	15'	5'	10'
20N 07W Sec 22	SJ 01417	620'	10'	610'
20N 07W Sec 22	SJ 01418	20'	5'	15'
20N 07W Sec 34	SJ 01419	350'	30'	320'
20N 07W Sec 08	SJ 01705	125'	88'	37'
20N 07W Sec 34	SJ 02615	360'	200'	160'
20N 06W Sec 32	SJ 00119	5007'	180'	4827'
20N 06W Sec 32	SJ 00119 Explore-1	5656'	255'	5401'
20N 06W Sec 11	SJ 01704	506'	229'	277'
20N 05W Sec 22	RG 91231 POD-1	143'	78'	65'
21N 05W Sec 32	RG 29678	2238'	769'	1469'

The aquifer in this area of the San Juan Basin primarily consists of the Ojo Alamo Sandstone. The top of the Ojo Alamo at this drill site is estimated to be approximately 200 feet below the surface. The Ojo Alamo is a permeable conglomerate and medium to very coarse sandstone interlayered with relatively impermeable shale. This aquifer contains fresh to moderately saline water. Dissolved-solids concentrations generally increase along the groundwater flow path from less than 1,000 milligrams per liter near recharge areas to about 4,000 as the formation is deeper into the basin.

Reference:

GROUND WATER ATLAS of the UNITED STATES Arizona, Colorado, New Mexico, Utah, HA 730-C, USGS, S.G. Robson and E.R. Banta, 1995

iWaters (Waters Database), New Mexico Office of the State Engineer, 2007

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 19, 30, 31 **Township:** 21N **Range:** 06W

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00832 O-1-EXPLOR		MON	SJ	4	3	1	28	21N	08W	257190	3989938*	53		
SJ 00832 O-5-EXPLOR		MON	SJ	1	2	1	20	21N	08W	255860	3992216*	348		
											Average Depth to Water:		--	
											Minimum Depth:		--	
											Maximum Depth:		--	

Record Count: 2

PLSS Search:

Township: 21N **Range:** 08W

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
RG 38729		DOM	CI	4	2	17	20N	07W		265860	3983385*	252	110	142
SJ 01415		STK	MK	4	4	16	20N	07W		267450	3982529*	512	40	472
SJ 01416		DOM	MK	1	1	22	20N	07W		267842	3982113*	15	5	10
SJ 01417		STK	MK	3	4	22	20N	07W		268615	3980884*	620	10	610
SJ 01418		STK	MK	2	1	22	20N	07W		268244	3982101*	20	5	15
SJ 01419		MUL	MK	3	3	34	20N	07W		267734	3977660*	350	30	320
SJ 01419 S		MUL	MK	3	3	34	20N	07W		267734	3977660*	350	30	320
SJ 01419 S 2		MUL	MK	3	3	34	20N	07W		267734	3977660*	350	30	320
SJ 01419 S 3		MUL	MK	3	3	34	20N	07W		267734	3977660*	350	30	320
SJ 01419 S-2		MUL	MK	3	3	34	20N	07W		267734	3977660*	350	30	320
SJ 01419 S-3		MUL	MK	3	3	34	20N	07W		267734	3977660*	350	30	320
SJ 01705		STK	MK	2	3	08	20N	07W		265079	3984620*	125	88	37
SJ 02615		SAN	MK	1	1	4	34	20N	07W	268446	3978150*	360	200	160

Average Depth to Water: **49 feet**

Minimum Depth: **5 feet**

Maximum Depth: **200 feet**

Record Count: 13

PLSS Search:

Township: 20N **Range:** 07W

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 01824		MUL	SA	3	3	1	07	21N	07W	263575	3994603*	100		
SJ 03562		SAN	SA	3	3	1	07	21N	07W	263575	3994603*	680	240	440

Average Depth to Water: **240 feet**

Minimum Depth: **240 feet**

Maximum Depth: **240 feet**

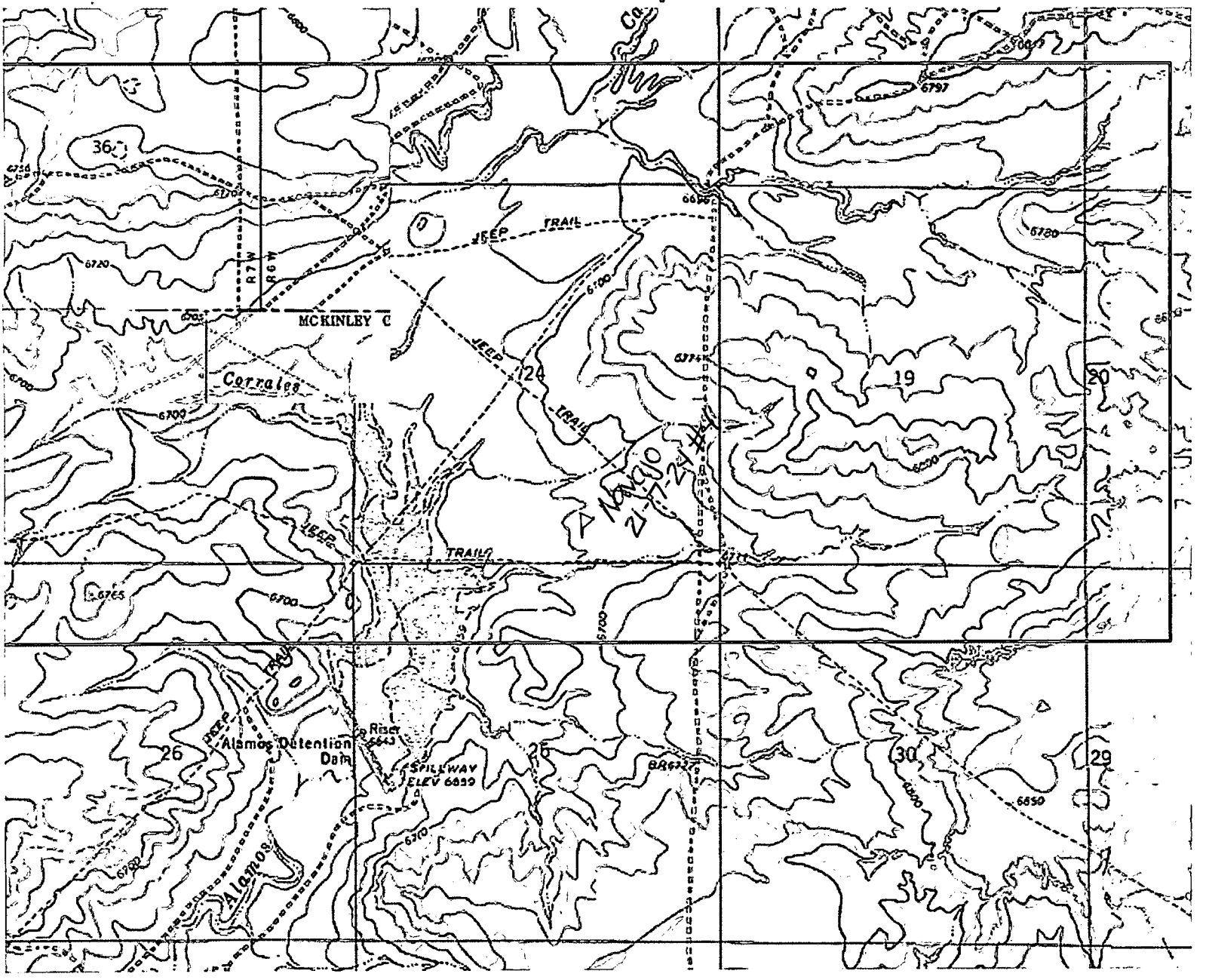
Record Count: 2

PLSS Search:

Township: 21N **Range:** 07W

***UTM location was derived from PLSS - see Help**

Print Map



Legend

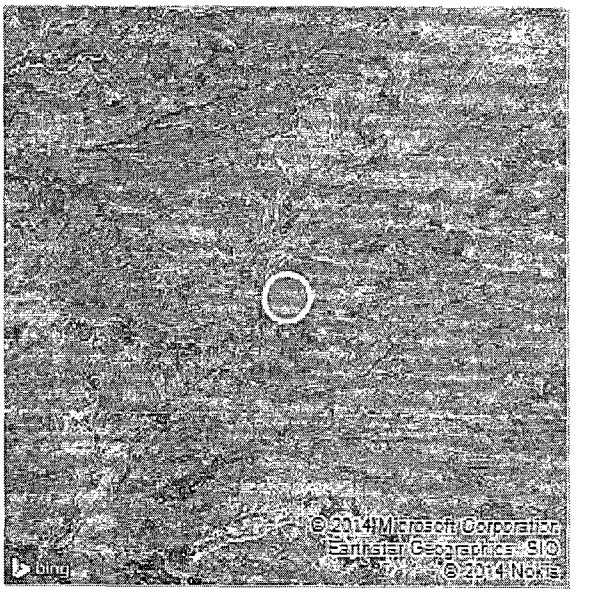
- Aggregates Etc.
- Clay & Shale / Brick
- Coal
- Gypsum
- Humate
- Limestone
- Metals
- Other
- Perlite
- Potash
- Pumice
- Salt
- Scoria
- Travertine
- Zeolites
- Aggregates Etc.
- Clay & Shale / Brick
- Coal
- Gypsum
- Humate
- Limestone
- Metals
- Other
- Perlite
- Potash
- Pumice
- Salt
- Scoria
- Travertine
- Zeolites

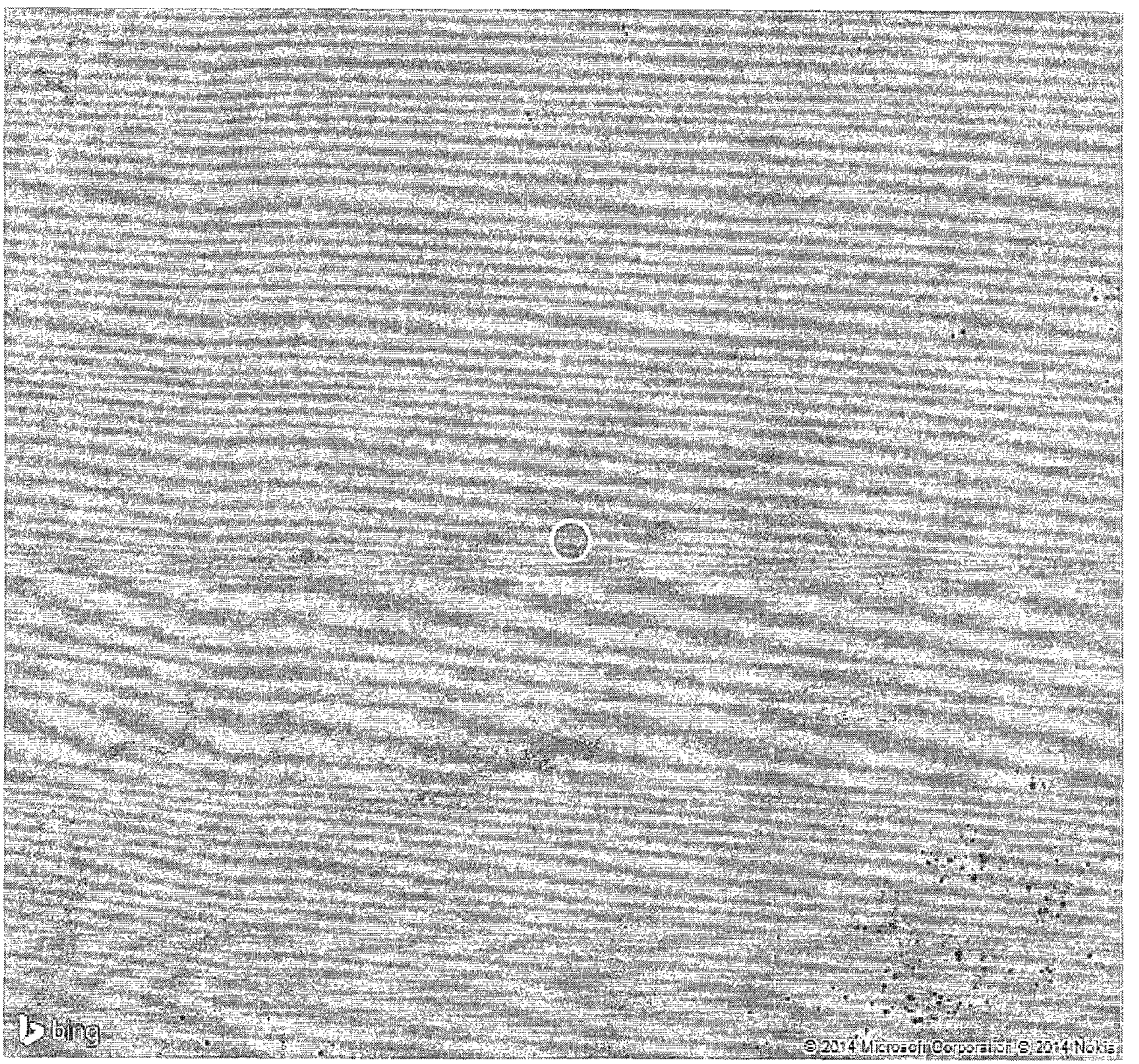
bing Maps

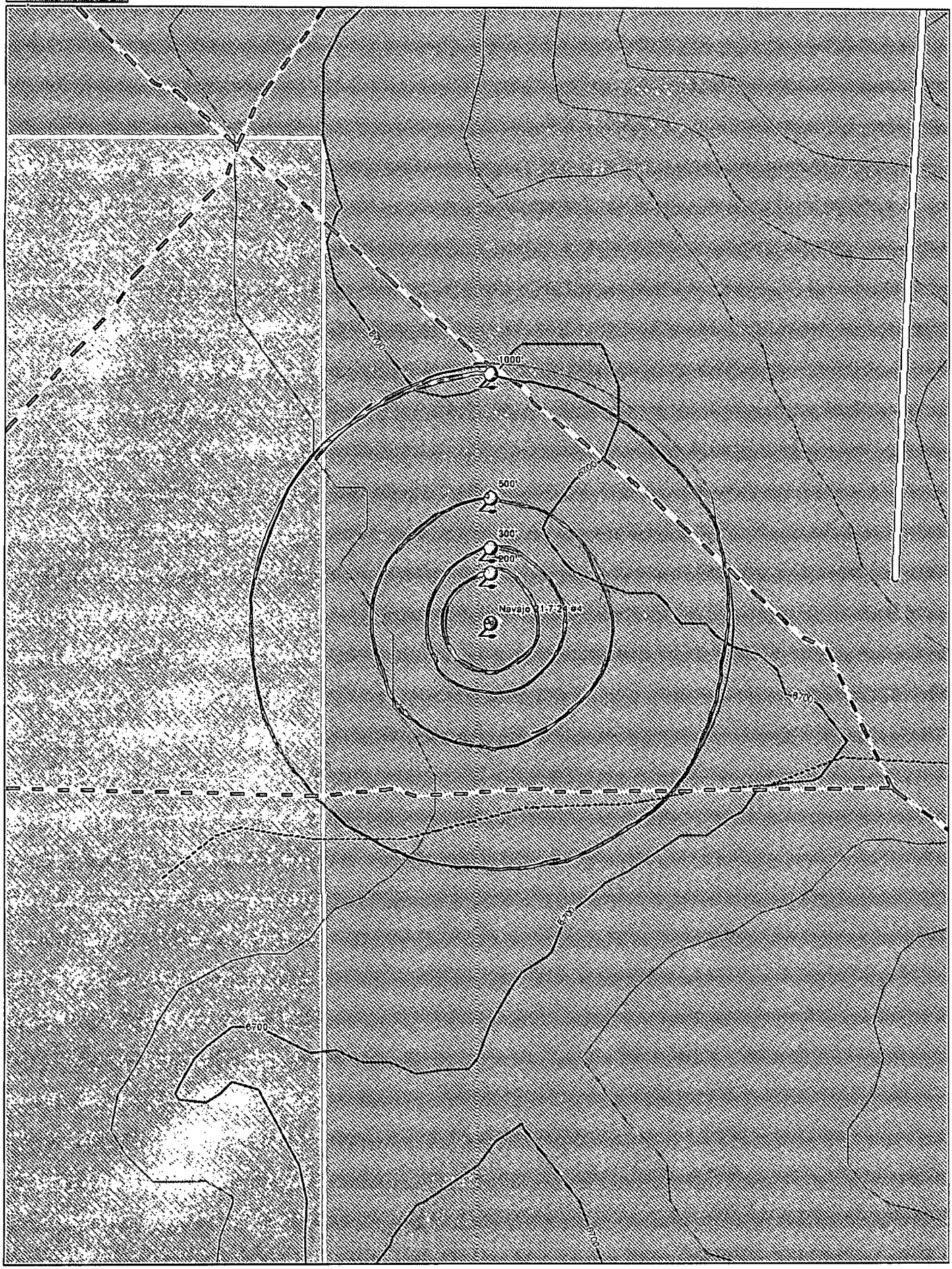
36.03122, -107.52636

My Notes

On the go? Use **m.bing.com** to find maps, directions, businesses, and more



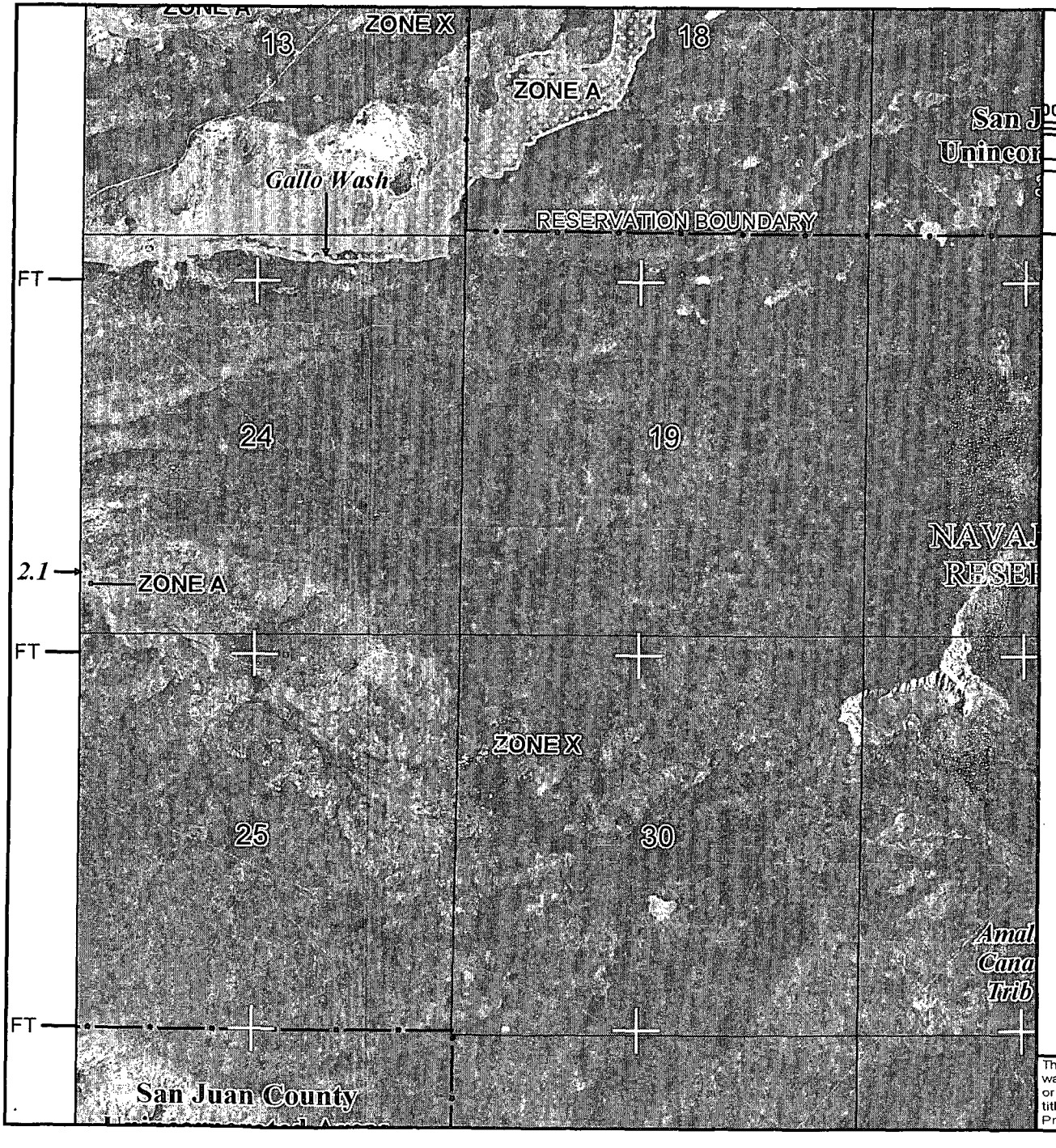




MN (9.3° E)

0 180 360 540 720 900 ft

Data Zoom 15-0



MAP SCALE 1" = 2000'

2000 0 2000 4000 FEET

0 600 1200 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 2750F

FIRM

FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY, NEW MEXICO

AND INCORPORATED AREAS

PANEL 2750 OF 2750

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SAN JUAN COUNTY	350064	2750	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
35045C2750F

EFFECTIVE DATE
AUGUST 5, 2010

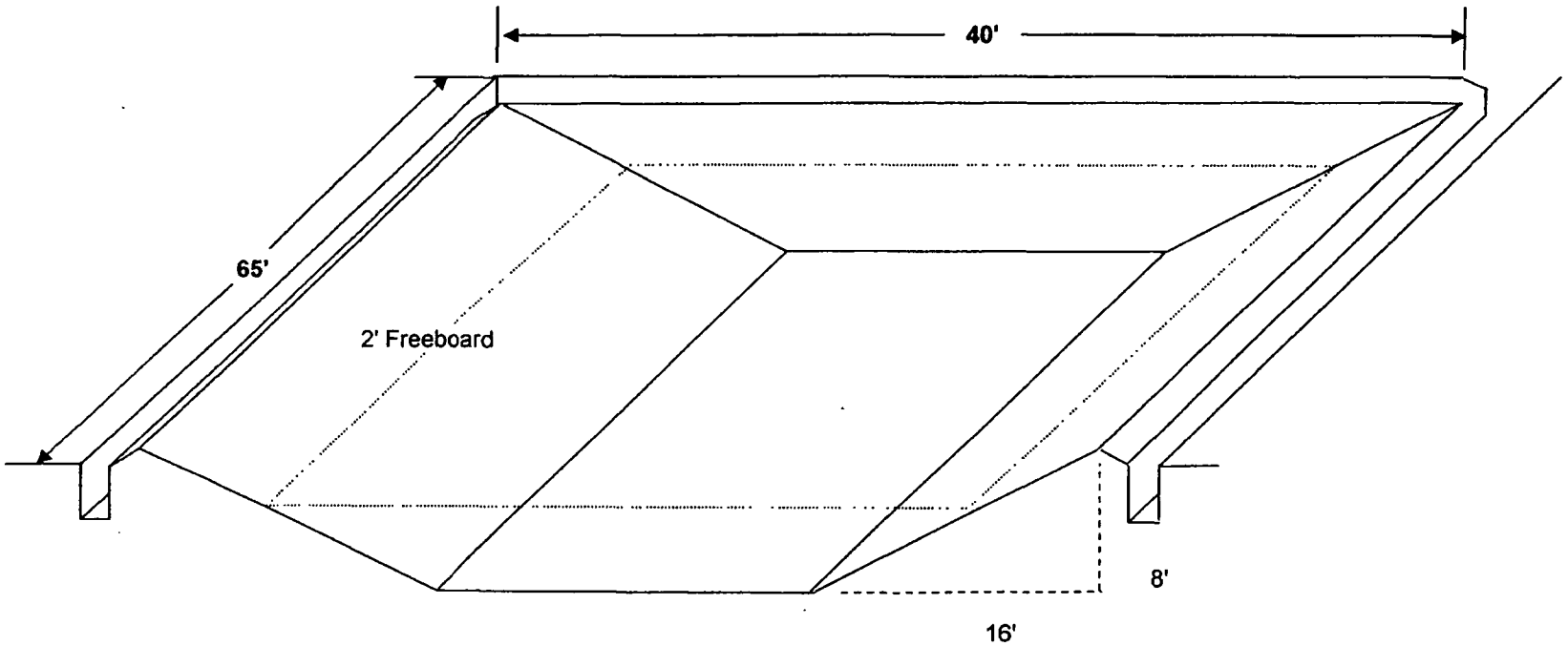
Federal Emergency Management Agency

SG Interests I, Ltd.

Temporary Pit Design & Construction Plan

1 - SG Interests will design and construct a temporary pit to contain liquids, solids, prevent contamination of fresh water, and protect public health and environment.
2 - Prior to constructing the pit, topsoil will be stockpiled per APD for later use in reclamation.
3 - SGI will have sign on location in compliance with 19.15.3.103 NMAC.
4 - SGI shall construct all new fences utilizing 48" hog wire on bottom with a single strand of barbed wire on top. T-posts will be installed a minimum of every 12 feet and corners will be braced. Temporary pits will be fenced at all times except during drilling or workover operations when the rig side of the fence will be temporarily removed for operational purposes.
5 - SGI shall construct the temporary pit so the foundation and interior slopes are compact, free of rocks, debris, sharp edges and irregularities to prevent liner failure.
6 - SGI shall construct the pit so the slopes are no steeper than two horizontal feet to one vertical foot. Any other design will be submitted for administrative approval.
7 - All temporary pits will be lined with a 20 mil string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
8 - Geo-textile will be installed beneath the liner if integrity will be compromised from sharp edges or irregularities.
9 - Liner will be anchored in the bottom of a compacted earth filled trench at least eighteen inches deep.
10 - Liner seams will be minimized and oriented up and down, not cross slope. Factory seams will be used wherever possible. Field seams will be overlapped four to six inches and welded by qualified personnel. Seams will be minimized in corners and irregularly shaped areas.
11 - The liner shall be protected from any fluid force through the use of mud pit slides or a manifold system.
12 - Diversion ditches and berms will be used to prevent natural runoff from entering pit.
13 - Pit volume will not exceed 10 acre feet, including freeboard.
14 - Temporary blow pits will be constructed to allow fluid discharged to unlined pit, as allowed by Rule 19.15.17.11.F.11, to gravity flow into lined pit.
15 – Freestanding liquids will not be allowed in unlined portion of a temporary blow pit.

Temporary Pit Design



Pit to be lined with 20 mil LLDPE Material

Liner will be anchored in anchor ditch

SG Interests I, Ltd.

Temporary Pit - Maintenance & Operating Plan

1 - SG Interests will design and construct a temporary pit to contain liquids, solids, prevent contamination of fresh water, and protect public health and environment.
2 - SGI will dispose of drilling fluids at Basin Disposal Inc., Permit # NM-01-005.
3 - SGI will not dispose of or store any hazardous waste in any temporary pit.
4 - If the pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid surface, the NMOCD Aztec Division office will be notified by phone or e-mail within forty eight hours.
5 - If a leak develops below the liquid level SGI shall remove all liquids above the damaged liner within forty eight hours and repair the damage to the liner. For leaks less than 25 Bbls SGI shall notify the NMOCD Aztec office within forty eight hours of the discovery. For leaks greater than 25 Bbls SGI shall notify the NMOCD Aztec office within twenty four hours of the discovery. In addition verbal notification shall be given to the divisions Environmental Bureau Chief.
6 - The liner shall be protected from any fluid force through the use of mud pit slides or a manifold system.
7 - Diversion ditches and berms will be used to prevent natural runoff from entering pit.
8 - SGI shall immediately remove any visible layer of oil from the surface of the temporary pit. An oil absorbent boom will be used to contain and remove oil from the pits surface. An oil absorbent boom will be kept on-site until closure of pit.
9 - Only fluids generated during the drilling or completion process will be discharged into a temporary pit.
10 - The pit will be kept free of miscellaneous solid waste and or debris.
11 - During drilling or completion operations, SGI will inspect the temporary pit at least once daily to insure compliance with this plan. Inspections will be logged in the IADC reports and SGI daily drilling reports. These reports will be filed with the NMOCD Aztec Division office upon closure of the pit.
12 - After drilling or completion operations, SGI will inspect the temporary pit at least once weekly so long as liquids are present in the pit. Inspections will be logged as a continuation of the SGI daily drilling report and will be filed with the NMOCD Aztec Division office upon closure of the pit.
13 - The temporary pit shall always maintain a minimum of two feet of freeboard.
14 - Freestanding liquids will be removed from a temporary pit within 30 days from the date the drilling rig is released and removed as needed thereafter until the pit is closed.
15 - SGI will remove all freestanding liquids from a cavitation pit within 48 hours after completing a cavitation. SGI may request additional time to remove liquids from the NMOCD Aztec Division office if SGI is not able to remove liquids in 48 hours.

SG Interests I, Ltd.

Temporary Pit - Closure Plan

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

Details on capping and covering (where applicable)
Plot Plan (Pit Diagram)
Inspection Reports
Sampling Results
C-105

1 – All freestanding liquids will be removed at the start of the pit closure process from the pit and disposed of in a division approved facility or recycle, re-use or reclaim the liquids in a manner that the appropriate division district office approves. SGI plans to dispose of drilling fluids at Basin Disposal Inc., Permit # NM-01-005, unless otherwise noted.
2 - The method of closure for all temporary pits will be on-site burial as long as all the criteria listed in sub-section B of 19.15.17.13 NMAC are met.
3 - The surface owner shall be notified of SGI closure plan using a means that provides proof of notice i.e., certified mail, return receipt requested or electronic mail with read receipt.
4 - Temporary pits will be closed, re-contoured, and re-seeded 6 months after drilling rig is released.
5 - "Notice of Closure" will be given to the NMOCD Aztec Division office within 72 hours of closure via electronic mail or verbally. The "Notification of Closure" will include:
    i. Operators Name
    ii. Location by Unit Letter, Section, Township, and Range
    iii. Well Name and API number.
6 - A five point composite sample will be taken of the pit using sampling tools and tested per 19.15.17.13.B.1.b. NMAC. Maximum limits for on-site burial are listed below:

Components	Test Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW 846 8021B or 8260B	50
TPH	EPA SW 846 418.1	2500
GRO/DRO	EPA SW 846 8015M	500
Chlorides	EPA 300.1	1000

In the event the criteria are not met all contents and remediation will be handled per 19.15.17.13.B.1 NMAC. If ground water is 50'-100' below the bottom of the buried waste all limits are the same except the chloride limit is reduced to 500 mg/kg. The sampling can be taken prior to mixing but if the contents exceed the parameters then contents must be sampled after mixing and meet the criteria before closure.

7 - Pit contents shall be mixed with non waste containing earth material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanical mixing. Pit contents will be mixed with non waste, earth material to a consistency that is deemed safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
8 - Liner of temporary pit will be removed above "mud level" after stabilization. Liner will be cut and all excessive liner will be removed and taken to a licensed disposal facility.
9 - Upon completion of solidification and satisfactory test results the pit area will be backfilled and compacted with non-waste earth material. A minimum of four feet of cover with the top foot (or background thickness of topsoil whichever is greater) suitable to establish vegetation at the site.
10 - The pit cover will be re-contoured and re-vegetated complying with subsections G, H, & I of 19.15.17.13 NMAC.
11 - Notification will be sent to NMOCD Aztec Division office when reseeding is completed.
12 - SGI will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished by drilling on the contour whenever practical or by other division approved methods. APD stipulated seed mixes will be used on Federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds. Seed cover will be maintained thru two consecutive growing seasons. Repeat seeding or planting will be continued until successive vegetative growth occurs.
13 - The closed temporary pit will have a steel marker no less than four inches in diameter, extending four feet above mean ground level, extending and cemented in a hole three feet deep, in the center of the onsite burial upon completion of the closing. The marker will be permanently welded, stamped or engraved to include the operator name, lease name, well name and number, unit number, section, township, range, and indicator that the marker is an onsite burial location. SGI reserves the right to install a temporary flat plate marker, one foot by two feet, with the same information if it is deemed necessary for safe operation on the wellsite during the productive life of the well. A full size marker will then be installed upon final abandonment.