

RECEIVED

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

State of New Mexico
August 5 2009
Department of Energy, Minerals and Natural Resources
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.

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

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

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

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

1. Operator: Samson Resource Co. OGRID #: 20165 -
Address: 200 N. Lorraine St., Ste. 1010 Midland, TX 79701
Facility or well name: Osuda 33 State Com. #1
API Number: 30-025-38486 OCD Permit Number: PI-DD321
U/L or Qtr/Qtr D Section 33 Township 20S Range 36E County: Lea
Center of Proposed Design: Latitude 32.533568°N Longitude 103.36537°W NAD: ☒ 1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☒ Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 12 mil ☐ LLDPE ☐ HDPE ☐ PVC ☒ Other Polyethylene
☒ String-Reinforced (data sheet attached)
Liner Seams: ☐ Welded ☐ Factory ☒ Other Sewn Volume: _____ bbl Dimensions: L 150 x W 150 x D 8

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.

Chips.

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.

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

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).

☐ Yes ☒ No

- Topographic map; Visual inspection (certification) of the proposed site

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☒ No

(Applies to temporary, emergency, or cavitation pits and below-grade tanks)

☐ NA

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☒ No

(Applies to permanent pits)

☐ NA

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

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.

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

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.

☐ Yes ☒ No

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Within 500 feet of a wetland.

☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Within the area overlying a subsurface mine.

☐ Yes ☒ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Within an unstable area.

☐ Yes ☒ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Within a 100-year floodplain.

☐ Yes ☒ No

- FEMA map

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 H₂S, 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 identify 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: Sundance Services, IncDisposal Facility Permit Number: NM-01-0003

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): Curtis Flanagan Title: Engineering Technician

Signature: Curtis Flanagan Date: _____

e-mail address: cflanagan@sdmson.com Telephone: (432) 686-6322

20.

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

OCD Representative Signature: [Signature] Approval Date: 8/22/08

Title: Geologist OCD Permit Number: P1-DD321

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: _____

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
☐ 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

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____



Centennial Tower
200 N. Loraine, Suite 1010
Midland, TX 79701
USA
432/683-7063
Fax 432/683-6847

As required by provisions of Subsection B of 19.15.17.13 of the New Mexico Pit Rule Closure Requirements for Temporary Pits, Samson Resources (Samson) presents the following information and Confirmation Sampling Plan for the Osudo 33 State Com. #1 located in Section 33, Township 20S, Range 36E in Lea County, New Mexico.

Protocols and Procedures:

1. The permitted Lined Temporary Drilling Pit at the above location will be closed at cessation of operations and as soon as practicable. The closure will not extend beyond the six month statute limit.
2. All liquids will be removed from pit prior to beginning the closure process.
2. The temporary pit will be closed by excavating all contents, including synthetic pit liner prior and transferring pit materials to a division-approved facility to be reported on form C-144 Closure Report.

Confirmation Sampling Plan:

1. Sampling will be performed in accordance with rules of 19.15.17.10 NMAC.
2. To determine whether a release has occurred, at a minimum, a five point composite sample will be collected beneath the temporary pit by Mobil Lab, a third party consultant.
3. Individual grab samples will be collected from any area that is wet, discolored or showing other evidence of a release.
4. The samples will be analyzed for benzene, total BTEX, TPH, the GRO and DRO combined fraction of chlorides to demonstrate that the concentrations do not exceed the division approved EPA method's standards.
5. Notification of the confirmation sampling analytical results will be submitted on form C-141.

Disposal Facility Name and Permit Number:

1. The proposed primary Solid Waste Disposal Site will be Sundance Services, Inc.,
P.O. Box 1737, Eunice, NM 88231-1737
Phone: (505) 394-2511.
2. The facilities' Disposal Permit number is NM-01-0003

Soil Backfill and Cover Design Specifications:

1. If the Confirmation Sampling Plan demonstrates that a release has not occurred or that any release that has occurred does not exceed the division approved EPA method concentrations for the subject location, then the temporary pit excavation will be reclaimed according to Subsections G, H and I of 19.15.17.13 NMAC.

Pg. 2

2. The temporary pit excavation will be backfilled and contoured with compacted, non-waste containing soil that consists of the background thickness of topsoil, which is approximately three to four feet.
3. The constructed soil cover will be that of the site's existing grade to prevent erosion and ponding of water and to allow the re-establishment of vegetation coverage.

Re-vegetation Plan:

1. Following the closure of the temporary pit at the Osudo 33 State Com. #1 in Lea County, New Mexico, the disturbed area(s) will be seeded within the first growing season.
2. Initial seeding will be accomplished by drilling on the contour. If re-seeding by drilling on the contour is not practical and can not be accomplished, an administrative approval from the Division District Office will be requested to use seeding by a broadcast technique as an alternative method.
3. A native perennial vegetative cover will be obtained through one or more of the methods described above that equal 70%.
4. The vegetative cover mixture will consist of at least three native plant species, including at least one native grass. Tomahawk Pumping will drill approximately 5 lbs of seed per acre.
5. The seed will consist of Sideoats Grama, Blue Grama, Buffalograss, and Sand Dropseed.
6. The vegetative cover will be maintained through two successive growing seasons with the addition of no artificial irrigation and will be re-seeded or planted until the required vegetative cover of 70% is achieved.

Site Reclamation Plan:

1. The temporary pit location and impacted surface area at the Osudo 33 State Com. #1 in Lea County, New Mexico will be reclaimed and restored to a stable condition that blends with the undisturbed surface area that existed prior to oil and gas operations.
2. As required by Subsections H and I of 19.15.17.13 NMAC, the location will be backfilled with non-waste containing soil, re-contoured to the original contour that blends with surrounding topography, and re-vegetated to achieve 70% of the native perennial cover.

WT Plastics, Ltd.

P.O. Box: 60004
Midland, Texas 79711

Phone 432-563-4005

Fax 432-561-5209



PROPERTY	TEST METHOD	DURA-SKRIM® 8WB		DURA-SKRIM® 12BB	
		English	Metric	English	Metric
Appearance		Black/Black or White/Black		Black/Black	
Thickness, Nominal		8 mil	0.20 mm	12 mil	0.30 mm
Weight		40 lbs/MSF	18kg/MSF	60 lbs/MSF	27 kg/MSF
		5.8 oz./yd ²	197 GSM	8.6 oz./yd ²	291 GSM
Construction		Extrusion laminated with scrim reinforcement			
1" Tensile Strength	ASTM D7003	52 lbf.	231 N	59 lbf.	263 N
Elongation at Break	ASTM D7003	600%	600%	650%	650%
Grab Tensile	ASTM D7004	70 lbf.	312 N	90 lbf.	400 N
*Trapezoid Tear	ASTM D4533	55 lbf.	245 N	72 lbf.	320 N
Hydrostatic Resistance	ASTM D751	70 psi	482 kPa	100 psi	689 kPa
Maximum Use Temperature		180°F	82°C	180°F	82°C
Minimum Use Temperature		-70°F	-57°C	-70°F	-57°C
Permeability					
WVTR	ASTM E96	0.030	0.46	0.023	0.35
	Procedure B	g/100in ² /day	g/m ² /day	g/100in ² /day	g/m ² /day
Perm Rating	ASTM E96	0.066	0.044	0.051	0.034
	Procedure B	U.S. Perm	Metric Perm	U.S. Perm	Metric Perm

*Tests are an average of diagonal directions.

8WB
8BB

12BB Linn. used

DURA-SKRIM® 8 and 12 both meet or exceed ASTM E-1745, Class "C" standard for water vapor retarders used in contact with soil or granular fill under concrete slabs.

DURA-SKRIM® 8BB, 8WB and 12BB are four layer reinforced extrusion laminates. The black outer layers consist of a high-strength polyethylene film containing carbon black. The white side contains UV and thermal stabilizers.

DURA-SKRIM® 8BB, 8WB & 12BB are reinforced with a minimum of 1000 denier scrim laid in a diagonal pattern spaced 3/8" apart with an additional machine direction scrim every 3" across the width. The individual plies are laminated together with molten polyethylene.

NOTE: To the best of our knowledge, these are typical property values and are intended as guides only, not as specification limits. WEST TEXAS PLASTICS, INC. MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

Test Hole

Osudu 33 St #1

5/11/08

Min/2'

0-2' Sandy Soil
4'-
6'-
8'-
10'-
2'
4'
6'
8'
20' ← Caliche + Clay
2'
4'
6'
8'-
30'
2'-
4'-
6'
8'
40' ← Mostly Red Clay, some
2'
4' Layer of Silt + stone
6'
8'
50'
2'
4'
6'-
8'-
60'
2'
4'
6'
8'
70'

Drilled 4 1/2" Hole w/ Drag Bit + Air
Foam Rotary. Shut Down 25 min.
After Blowing Hole Clear. Restarted air
And blew hole to check for water. None
was found. Plugged hole to surface w/ Bentonite
Chips.

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: Range: 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

POD / SURFACE DATA REPORT 07/15/2008

DB File Nbr	(acre ft per annum)	Use	Diversion	Owner	POD Number	Source	Tw	Rng	Sec	q	q	q	Zone	X Y are in
L 01522	STK	3	B.E. HUGHES	L 01522		20S	36E	08	1	1	1			
L 02420	PRO	3	MORAN DRILLING CO.	L 01522 APPRO		20S	36E	08	1	1	1			
L 02540	PRO	3	AMERANDA PETROLEUM CORP.	L 02420	Shallow	20S	36E	18	1	2				
L 02552	PRO	3	AMERDA PETROLEUM CO.	L 02420 APPRO	Shallow	20S	36E	18	1	2				
L 02584	PRO	0	AMERADA PETROLEUM CORPORATION	L 02540		20S	36E	34	2	4	3			
L 02707	PRO	3	CONTINENTAL OIL CO.	L 02552		20S	36E	34	2	4				
L 03188	PRO	3	AMERADA PETROLEUM CORPORATION	L 02584	Shallow	20S	36E	26	1	4	4			
L 03814	DOM	3	W. C. BYRD	L 02584 APPRO	Shallow	20S	36E	26	1	4	4			
L 04506	PRO	3	CONTINENTAL OIL CO.	L 02707	Shallow	20S	36E	09	2	2	2			
L 04507	PRO	3	CONTINENTAL OIL CO.	L 02707 APPRO	Shallow	20S	36E	09	2	2	2			
L 04736	DOM	3	CLIMAX CHEMICAL COMPANY	L 03188		20S	36E	01	4	1	2			
L 06667	STK	0	COOPER BROTHERS	L 03188 APPRO		20S	36E	01	4	1	2			
				L 03814	Shallow	20S	36E	01	2	2	2			
				L 03814 APPRO	Shallow	20S	36E	01	2	2	2			
				L 04506	Shallow	20S	36E	14	3	3				
				L 04506 APPRO	Shallow	20S	36E	14	3	3				
				L 04507	Shallow	20S	36E	14	2	3				
				L 04507 APPRO	Shallow	20S	36E	14	2	3				
				L 04736	Shallow	20S	36E	02	1	1				
				L 04736 APPRO	Shallow	20S	36E	02	1	1				
				L 06667 EXP		20S	36E	14	4	1	1			

<u>L 06986</u>	DOM	3	EDWARD H. KLEIN	<u>L 06986</u>	Shallow	20S	36E	15	4	2
<u>L 10135</u>	STK	3	JIM COOPER	<u>L 10135</u>	Shallow	20S	36E	14	2	4
<u>L 10246</u>	DOM	0	KLEIN FAYE L	<u>L 10246</u>	Shallow	20S	36E	03	3	1 1
<u>L 10247</u>	DOM	0	KLEIN FAYE L	<u>L 10247</u>	Shallow	20S	36E	05	1	3
<u>L 10248</u>	DOM	0	KLEIN FAYE L	<u>L 10248</u>	Shallow	20S	36E	09	1	3
<u>L 10249</u>	DOM	0	KLEIN FAYE L FOR HARRY SCOTT &	<u>L 10249</u>	Shallow	20S	36E	10	2	3
<u>L 10250</u>	DOM	0	KLEIN FAYE L	<u>L 10250</u>	Shallow	20S	36E	10	4	3
<u>L 10251</u>	DOM	0	KLEIN FAYE L	<u>L 10251</u>	Shallow	20S	36E	11	4	4
<u>L 10252</u>	DOM	0	KLEIN FAYE L	<u>L 10252</u>	Shallow	20S	36E	15	2	4
<u>L 11184</u>	DOM	3	JIM COOPER	<u>L 11184</u>	Shallow	20S	36E	26	2	2 2

Record Count: 31

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: Range: 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

POD / SURFACE DATA REPORT 07/17/2008

DB File Nbr (acre ft per annum)
Use Diversion Owner

POD Number

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

(quarters are biggest to smallest X Y are ir
Source TwS Rng Sec q q q Zone }

No Records found, try again

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: Range: 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

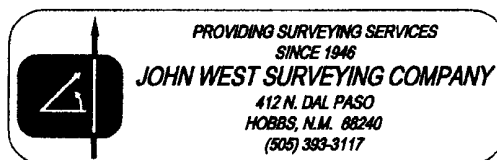
AVERAGE DEPTH OF WATER REPORT 07/15/2008

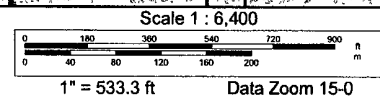
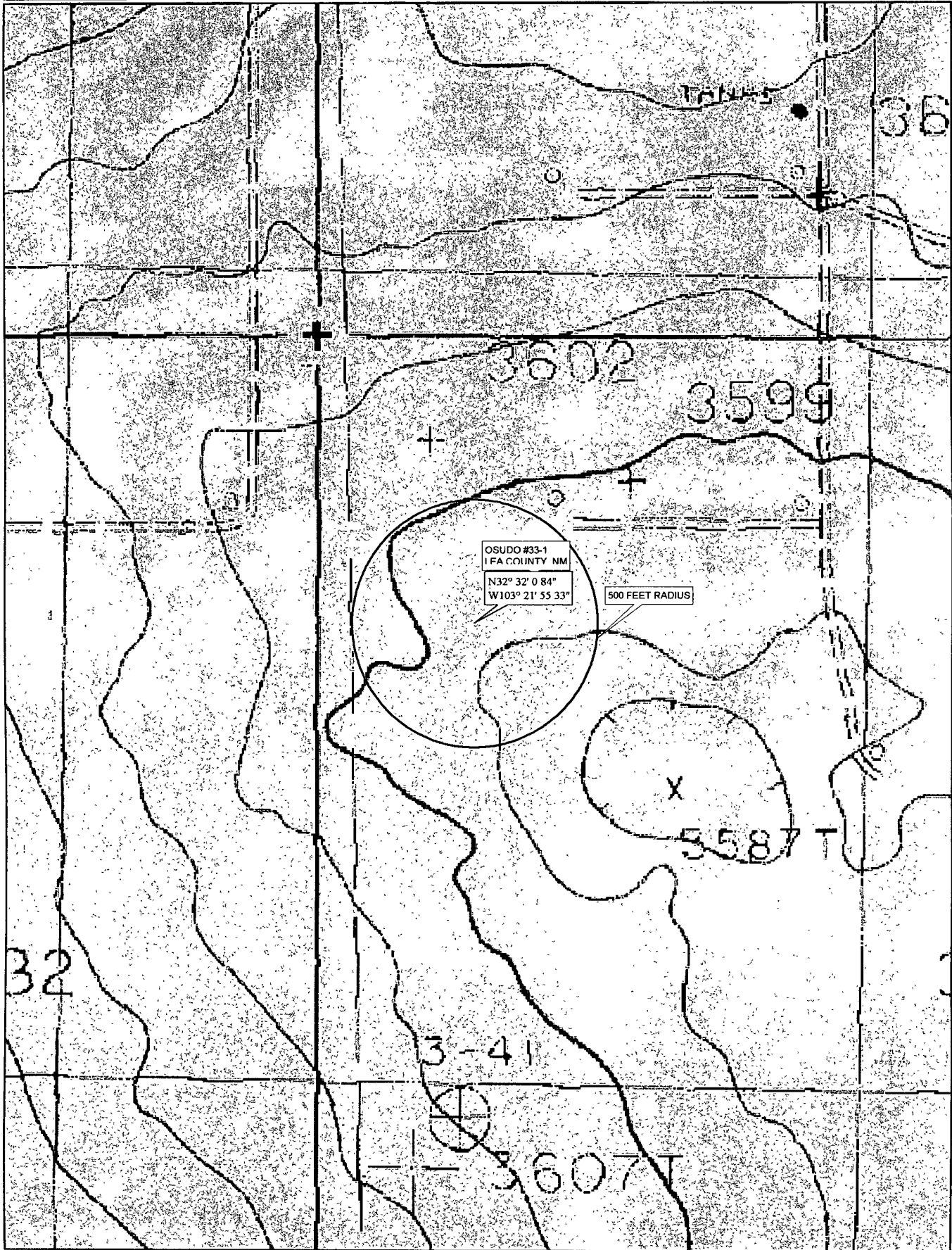
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
L	20S	36E	01				3	40	40	40
L	20S	36E	02				2	92	92	92
L	20S	36E	09				2	38	38	38
L	20S	36E	14				5	20	53	45
L	20S	36E	15				1	265	265	265
L	20S	36E	18				2	34	34	34
L	20S	36E	26				2	170	170	170

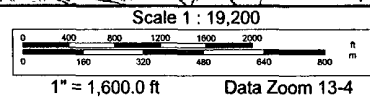
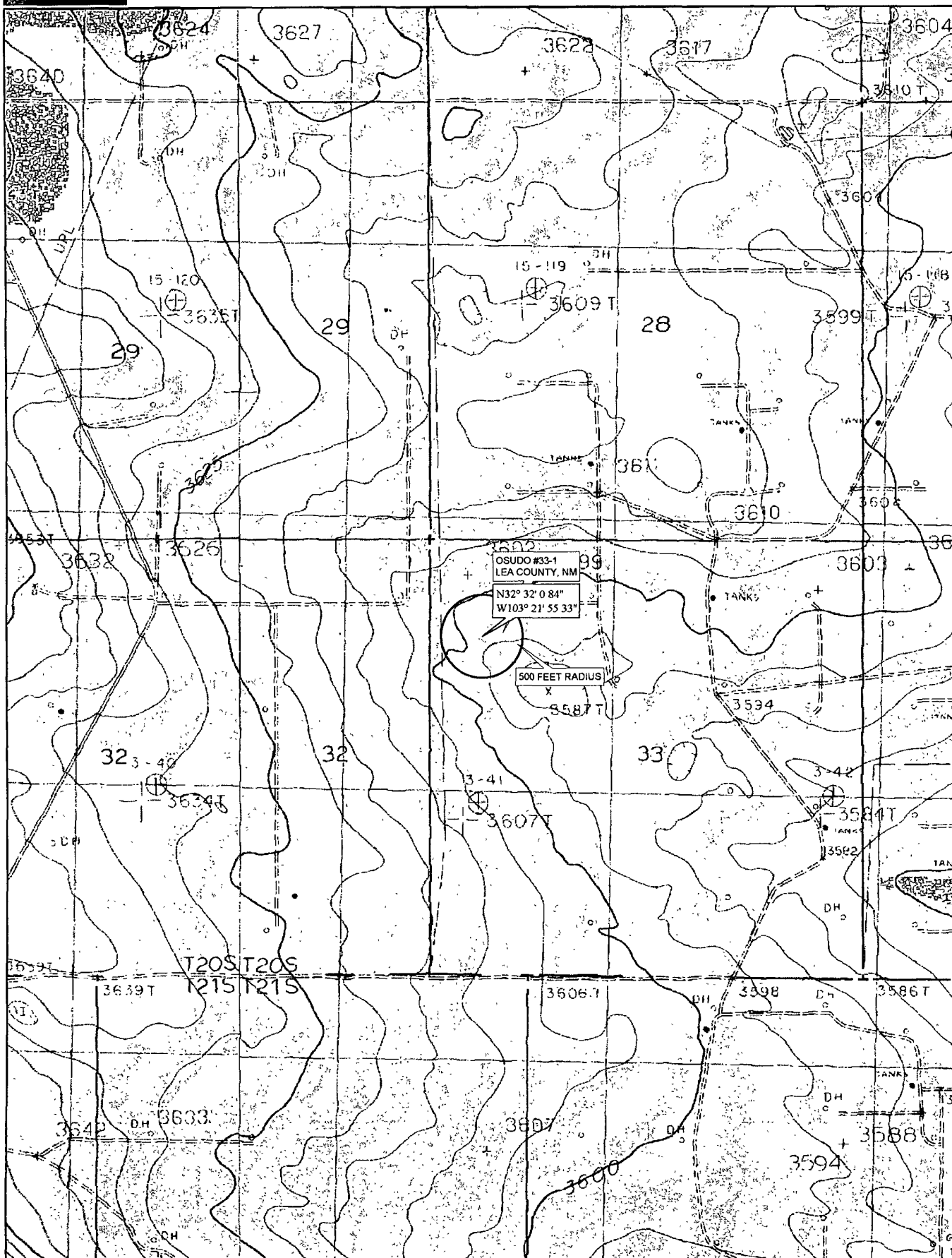
Record Count: 17

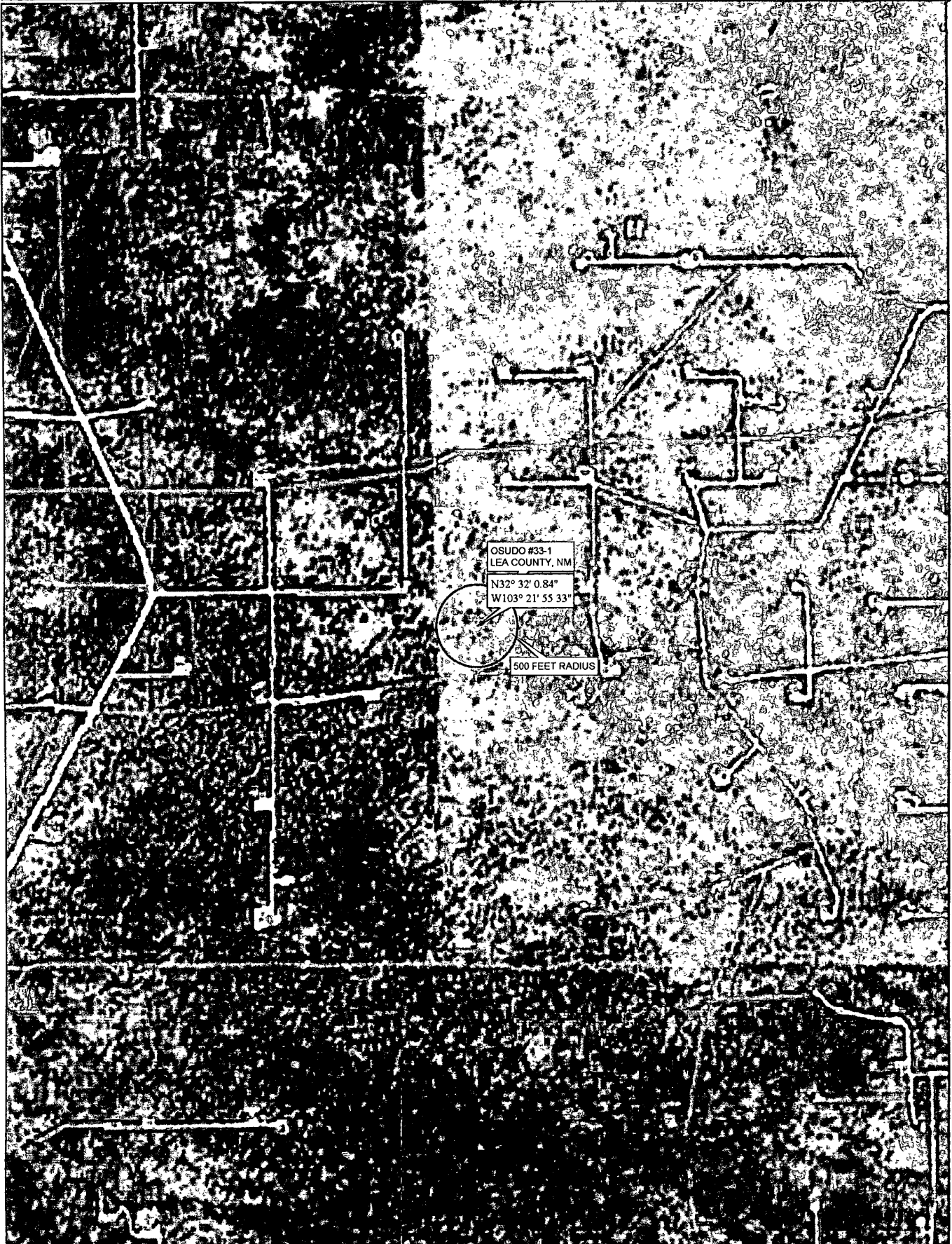
CONTOUR INTERVAL:
MONUMENT SOUTH, N.M. - 5'

U.S.G.S. TOPOGRAPHIC MAP
MONUMENT SOUTH, N.M.

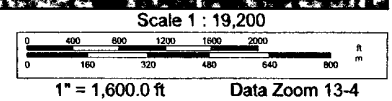








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Carlsbad Caverns National Park

32.53357, -103.36537

285

62

180

385

82

Midland

Odessa

Google

20

Eye alt 196.30 km

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Image © 2008 DigitalGlobe
©2008 Tele Atlas

32°32'00.97"N 103°21'55.31"W

elev 1121 m

