Form C-144 July 21, 2008

District 1
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For perimanently and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD [1] District Office.

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

<u>Propose</u>	d Alternative Method	l Permit or Closu	<u>re Plan Applicat</u>	<u>tion</u>
Existing BGT	Permit of a pit, closed-loop Closure of a pit, closed-loop Modification to an existing Closure plan only submitted or proposed alternative method	p system, below-grade to permit if or an existing permitt	ank, or proposed altern	native method
Instructions: Please submit on	ne application (Form C-144) per	individual pit, closed-loop	system, below-grade ta	nk or alternative request
Please be advised that approval of this requentironment. Nor does approval relieve the	est does not relieve the operator of leoperator of its responsibility to con	liability should operations remply with any other application	sult in pollution of surfaction ble governmental authorit	e water, ground water or the y's rules, regulations or ordinances
Operator: XTO Energy, Inc.		OGRIE)#:5380	
Address: #382 County Road 3100), Aztec, NM 87410	<u></u>		
Facility or well name:FEE #3B				
API Number: <u>30-045-32291</u>		OCD Permit Number:		
U/L or Qtr/Qtr P Section	<u>03</u> Township <u>30N</u>	Range11W_	County: San Jur	an_
Center of Proposed Design: Latitude _	36.836868	Longitude107.9729	34	_ NAD: □1927 🖾 1983
Surface Owner: 🖾 Federal 🔲 State 🗆	Private Tribal Trust or Indian	n Allotment		
Temporary: Drilling Workover Permanent Emergency Cavit Lined Unlined Liner type: Ti String-Reinforced Liner Seams: Welded Factory 3. Closed-loop System: Subsection	ation P&A hicknessmil LLI			
Type of Operation: P&A Drillinitent) Drying Pad Above Ground Ste Lined Unlined Liner type: This Liner Seams: Welded Factory	eel Tanks	Other HDPE PV	_	
4. Below-grade tank: Subsection I of Volume: 120 bbl Tank Construction material: Secondary containment with leak of Visible sidewalls and liner Visible the Visible sidewalls Liner type: Thickness Containment Visible tank Visible sidewalls Visible tank Visible tank Visible tank Visible tank: Subsection I of Visible tank Visible tank Visible tank: Subsection I of Visible tank Visible tank Visible tank: Subsection I of Visible tank Visible tank Visible tank: Subsection I of Visible tank Visible tank Visible tank Visible tank Visible tank Visible tank Visible tank Visible tank Visible tank Visible	Type of fluid: Produced steel letection Visible sidewalls, listible sidewalls only Other	iner, 6-inch lift and automa Visible sidewalls, vaulted,	automatic high-level shu	ut off, no liner
5. Alternative Method: Submittal of an exception request is recommended.	quired. Exceptions must be subm	nitted to the Santa Fe Envir	onmental Bureau office	for consideration of approval.
Form C-144	Oil Cor	nservation Division		Page 1 of 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, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify Four foot height, steel mesh field fence (hogwire) with pipe top railing	hospītal,
	7.	
	Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) □ Screen □ Netting ☑ Other Expanded metal or solid vaulted top □ Monthly inspections (If netting or screening is not physically feasible)	
	s. 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	
	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 consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
	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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval.
	Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	⊠ Yes □ No
	Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes 🛛 No
	Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
I	Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	☐ Yes ☐ No ☑ 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. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	⊠ Yes □ No
	Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ⊠ No
	Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
ı	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

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 19.15.17.12 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.13 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
Previously Approved Design (attach copy of design) API Number: or Permit Number:
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:
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 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 ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Erosion Control Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
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)
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 G 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: (19.15.17.13.1 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.	
Disposal Facility Name: Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service. Yes (If yes, please provide the information below) \(\subseteq\) No	vice and operations
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 G of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	С
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 sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate disting considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justi demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rict office or may b
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
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
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan 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 19.15.17.13 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 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 G of 19.15.17.13 NMAC	15.17.11 NMAC

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): Kim Champlin Title: Environmental Representative
Signature: Nivi Champler Date: 11.21.08
e-mail address: kim_champlin@xtoenergy.com Telephone; (505) 333-3100
34.
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Approval Date: 09/24/15
OCD Permit Number:
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.
Clesure Completion Date:
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 Report Report 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 that 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) \(\subseteq \text{No} \)
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
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 bax, 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 NAD: 1927 1983
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 | 1625 N. Ferich Br., Hobbs, N.M. 88240 State of New Mexico Energy, Minerals & Natural Resources Department

DISTRICT II 1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III 1000 Ria Brazos Rd., Aztec, N.M. 87410 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Sonta Fe, NM 87504-2088 Form C-102
Revised June 10, 2003
Instructions on back
Submit to Appropriate District Office
State Lease — 4 Capies
Fee Lease — 3 Capies

☐ AMENDED REPORT

DISTRICT IV 1220 South St. Francis Or., Sonte Fe, NM 87505

		W	VELU LO	DCATIO	N AND AC	REA	AGE DEDI	CAT	TION PL	_AT		
[†] API	Number			² Pool Code					³ Paol Home	7		
⁴ Property Co.	je				*Property >	Yam e					* A	rell Number 3B
TOCRID No.					*Operator (Home						Elevation
					XTO ENERG	Y IN	C.					5779
					10 Surface	Loca	ution			·		
UL or fot no.	Section	Township	Ronge	Lot Idn	Feet from the	7	th/South line	Feet	from the	East/Wes		County SAN JUAN
р	3	30-N	11-W		1015	, D.(1020		31	3747 00747
UL or let no.	Section	Township	"	tat Ida	Location 1		ferent From		Irigge Iron the	Equt/Wes	it line	County
DE. 00 191 1101	3021427		Kanya	ear rain		""			nam una	,		County
Dedicated Acres		n %	oint or Infill		H Consolidation C	ode .		¹¹ Ori	Jer No.			
NO ALLOW	ABLE W				S COMPLETION						EN CO	NSOLIDATED
		UK A N	1014-217	INDARD	UNIT TIAS B	CEN	AFFROYEL	וט כ	יותב טוי	AIDIOIA		
£.01	4	LC	DT 3		TO1 5		1.01 1		I hereby certify	that the lifts	rmation con	RTIFICATION turned herein in ordedge and bellef
				3			QTR. COR FD 3 1/4 BLM 1965	F, BC	f hereby carti was plotted fr	JRVEYOR If that the worn field note supervision, a	rell location s of actual and that th	TIFICATION a shown on this plat is sureys made by me as some is true and
SEC. CORNER FD 1° REBAR			N 89	36'50'11 5:107'58'2 	" N. (NAD 27 21' W. (NAD 3	7) (77) (77)	1020' LOT 5 SEC. COI FO 3 1/ BLM 196	00'28'50" E		1482)) 24	Suyoyor:

Client: **XTO Energy Pit Permit** Lodestar Services, Inc. **Project: Pit Permits Siting Criteria** Revised: 7-Nov-08 O Box 4465, Durango, CO 81302 **Information Sheet** Prepared by: **Brooke Herb** API#: 3004532291 **USPLSS:** T30N,R11W,S03P Name: **FEE #3B** Lat/Long: 36.836868, -107.972934 Geologic Depth to groundwater: < 50' **Nacimiento Formation** formation: Distance to closest continuously flowing 1.01 miles E of the Animas River watercourse: Distance to closest 1929' E of Lower Animas Ditch: significant watercourse, 973' SE of pond; 2279' SW of lakebed, playa lake, or Callaway Canyon sinkhole: Soil Type: **Entisols** Permanent residence, school, hospital, Yes - 282' S of Permanent institution or church Residence within 300' **Annual** 9.77 inches (Aztec) Precipitation: **Domestic fresh water** Precipitation well or spring within No Notes: 500' Any other fresh water Yes - 633' E of iWaters well well or spring within SJ03291; 952' SW of SJ01249 1000 Within incorporated **Attached** No - 630' NE of Aztec city municipal boundaries boundaries **Documents:** Within defined municipal fresh water No well field Wetland within 500' Mining Activity: No

no significant precip events Groundwater report and Data; FEMA Flood Zone Map Aerial Photo, Topo Map, Mines Mills and Quarries Map 536' NW of a Materials Pit Within unstable area No Within 100 year flood No- FEMA Flood Zone 'X' plain **Additional Notes:** Page 1 of 1

FEE #3B Below Ground Tank Siting Criteria and Closure Plan

Well Site Location

Legals: T30N, R11W, Section 03, Quarter Section P

Latitude/Longitude: approximately 36.836868, -107.972934

County: San Juan County, NM General Description: near Aztec

General Geology and Hydrology

The San Juan Basin is a typical Rocky Mountain basin with a gently dipping southern flank and a steeply dipping northern flank. Asymmetrically layered Tertiary sandstones and shales, along with Quaternary alluvial deposits dominate surficial geology (Dane and Bachman, 1965). The proposed below ground tank location will be located near Callaway Canyon between the Animas and San Juan rivers. The Nacimiento Formation of Tertiary Age is exposed, along with Quaternary alluvial and aeoloian sands within dry washes and arroyos.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface. Thickness of the Nacimiento ranges from 418 to 2232 feet (Stone et al., 1983). Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000' deep in this section of the basin (Stone et al., 1983). Groundwater within these aquifers flows toward the nearby San Juan River and its tributaries.

The prominent soil type at the proposed site is entisols, which are defined as soils that do not show any profile development. Soils are basically unaltered from their parent rock. Miles of arroyos, washes and intermittent streams exist as part of the drainage network towards the La Plata River (www.emnrd.state.nm.us). These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes soils that cover the area.

The climate of the region is arid, averaging just over 8 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs in the summer in isolated, intense cloudbursts. November through June is relatively dry. Snow generally falls from December to mid-February and averages less than one-half inch in depth. However, most recharge occurs during the winter months during snowmelt periods from the upper elevations (Western Regional Climate Center www.wrcc.dri.edu).

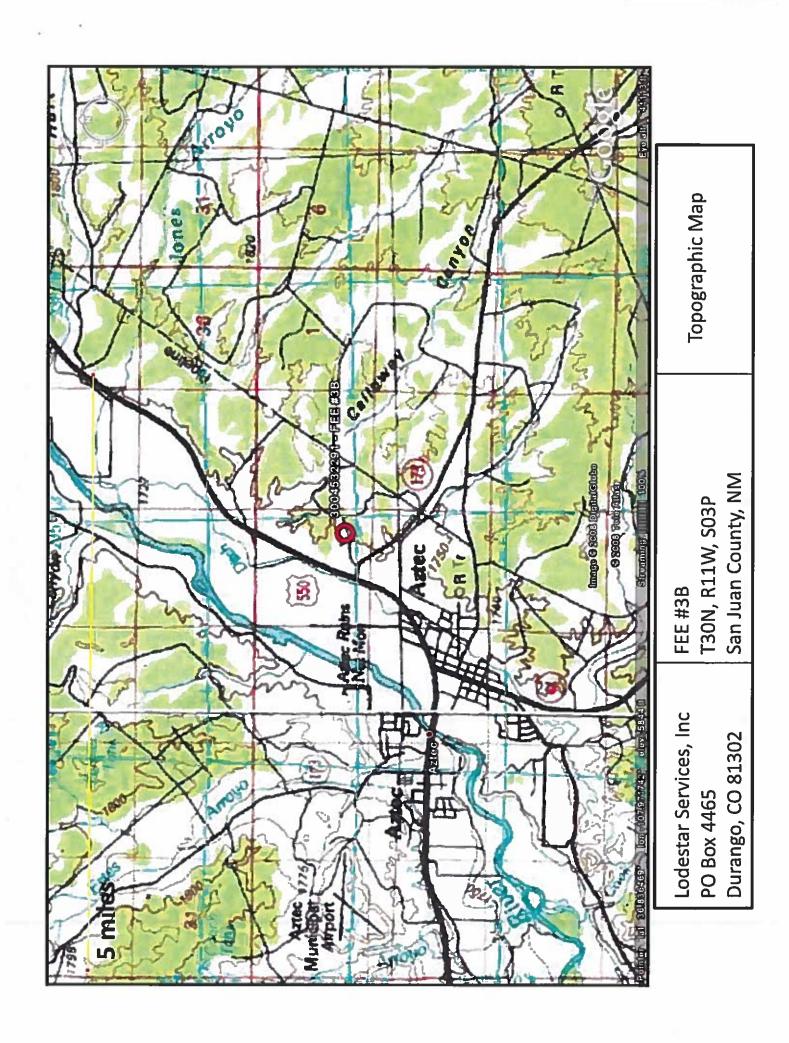
The predominant vegetation is sagebrush and grasses with a more restricted pinon-juniper association (Dick-Peddie, 1993).

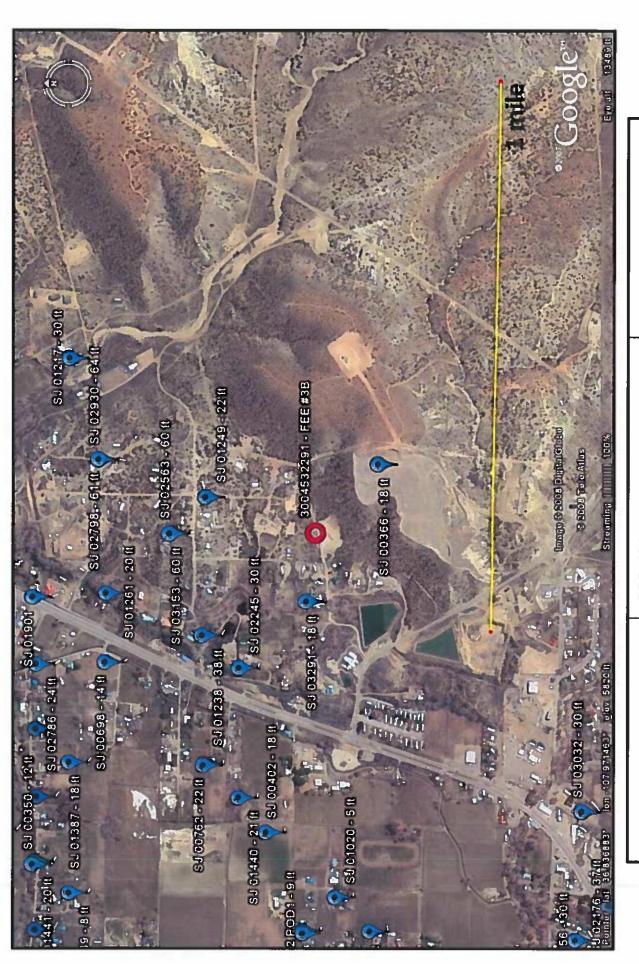
Site Specific Hydrogeology

Depth to groundwater is estimated to be less than 50 feet. This estimation is based on data from Stone and others, 1983 and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity to surface hydrologic features are also taken into consideration.

Local aquifers include sandstones within the Nacimiento Formation, which ranges from 0 to 1000 feet deep in this area, as well as shallow aquifers within Quaternary alluvial deposits (Stone et al., 1983). The 1000-foot depth range for Nacimiento aquifers covers an area over 20 miles wide, and depth decreases towards the margin of the San Juan Basin. The site in question is more centrally located, and depth to the aquifer is expected to be closer to 1000 feet. It is well known that groundwater close to the Animas River can be shallow, as the Quaternary deposits near the river itself form shallow aquifers. The proposed site is situated 1.01 miles to the east of the Animas River, and is approximately 163 feet higher in elevation (Google Earth).

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. A map showing the location of wells in reference to the proposed pit location is also included. Pinpoints show locations of wells and the labels for each pinpoint indicate depth to groundwater in feet. Wells are clustered to the west and north along the Animas River. Depth to groundwater within the nearby wells ranges from 5 feet to 64 feet below ground surface. The closest well to the proposed site is located approximately 633 feet to the west, and is approximately 35 feet lower in topographic elevation (Google Earth). Depth to groundwater within the well is 18 feet below ground surface. A well to the northeast is approximately the same elevation as the proposed site, and has a depth to groundwater of 22 feet below ground surface. A well to the northwest is approximately 40 feet lower in elevation then the proposed site, and has a depth to groundwater of 30 feet below ground surface.





Lodestar Services, Inc
PO Box 4465
Durango, CO 81302
FEE #3B
T30N, R11M

FEE #3B T30N, R11W, S03P San Juan County, NM

| iWaters Groundwater | Data Map New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30N Range: 11M Sections:

POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

WATER COLUMN REPORT 09/29/2008

ф)	artera	are	T di	M	= 100	(quarters are 1=NW 2=NB 3=SW 4=SB)							
<u>а</u> Б)	artera	are	P Di	ges	it t	(quarters are biggest to smallest)			Depth	Depth	Water (in feet)	di)	feet)
POD Number	Twa	Rag		ש	<u>p</u>	Zone	×	> +	Well	Water	Column		
RG 50669	30N	21							998	310	0 10		
SJ 02765	30%	7.17	8	ed.					*# 10	90	rge (rg		
SJ 00975	308	2	8	e-f					0	01	o T		
SJ 01217	30%	11.6	9	H					ψ	m	00		
SJ 02837	303	MIT.	S	(1)	:1				OST				
SJ 01437	30%	117	60	н					9	(I) (1)	터		
SJ 03121	30%	17.0	0	el	aP.				(r)	C1	चा [*] ()		
SJ 02049	30%	113	0	H					ψ	111	cts 1		
SJ 01339	30%	114	60	-1	201				9	10	ID CII		
SJ 02814	303	117	60	-1	Çij.				:-t (*)	ш	to CH		
SJ 00350	302	213	(7)	-1	C (II)				ব্য	E I	33		
SJ 01441	30%	113	(1) (T)	-1	e i				cle	ő	64		
SJ 02835	303	R T	(D)	-1	ej.				יט נו	41)	-H		
SJ 01387	303	17.7	(1)	-1					G) Sp	el	ei ei		
SJ 03698 POD1	30%	211	9	-i	èч				O T	u)	m		
SJ 02785	30%	117	9	-1	61				el	w	ψ CI		
SJ 01313	36%	113	9	Ç I					16	10	티		
SJ 01805	30%	7.1	9	c i					(r)	90	ii) H		
SJ 01807	30%	11.7	00	61					010	(i)	00		
SJ 01202	SCN	211	8	CI	e i				(P)	di	27		
SJ 02781	30%	110	9	c i	61				ele Gi	(1)	10 C I		
	308	119	9	CI	ed.	0.00	w	5117478	th T	FI	en en		
SJ 03765 PCD1	308	:14	9	C I	e)	26010	(7)	2127605	Д. (4)	9	e) El		

CT 03756 DOD1	MUE	315	6		•	201070	0000000		c	
02786	30N	113) (C)	1 E1	l el	1	į.	י נס	i (:)	I G
SJ 01901	30%	118	03	L1 (A)	13				φ Cl	34
	BON	35	03	(d	ന				4.	30
57 01261	36N	118	03	61 (C)	4.				20	
SJ 02930	30N	111	03	6.1 #4	₹1"			رن در	40	17
SJ 02798	3CM	118	03	্। থা	434				61	15
SJ 00402	30%	318	03	m				32	œ	14
SJ 01734	30N	111	03	c। ल					LI)	c.t
SJ 00762	NOE	111	03	C1				47	22	c1 មោ
57 01440	36M	118	03	61	ന			4	12	di Ci
5J 01020	36N	119	03	(1)					ເຄ	(A)
5J 03242	30%		03	ල ල	rd			단	ď١	판
SJ 03732 PCD1	NOE		03	ල ල	-1			en en	υħ	Ŋ
SJ 03239	308		03	ო ო	m			33	113	27
	30N		03	4				n G	យ	53
SJ 02245	BON		03	근(각	ස			99	30	36
SJ 01043	30N		03	4	et.			00		
SJ 01249	HOE		03	ية. در				52	td Ed	30
SJ 02563	30M		03	4.	m			96	66	36
	30N		03	त्य स्य	et			70	011	20
	BON		03	4t	-1			80	09	20
SJ 03454	30N		03	d CI	<pr< th=""><th></th><th></th><th>100</th><th></th><th></th></pr<>			100		
\$3 03291	BON		60	ন্দ ল	2			38	3.69	90
SJ 00366	BON		63	<u>ዋ</u>	474			33	en H	10
SJ 01364	30N	TIM	04	64				115	Q (II	CI Q
SJ 03076	30N	BIT	04	61	m			4.	10	ማ
SJ 02903	30N	318	40	c1	61			ል ብ	et en	E E
SJ 03039	30N	31W	4.0	4	13			833	40	e H
	BON		04	ক ক				45	20	មា
SJ 02941	30N		04	43	64			SB	37	
SJ 01367	BOK	21W	04	4.	1-1			48	50	c)t
45.	30%		40	ক ক	™	453700	2124100	30	ιĵ	ល
SJ 03267	30N		S O	F1	9				ာ မ	ଧ
SJ 03245	30M		90	4r	Ţ				e O	121
SJ 02194	30%		0.2					ភា ហ	EN EN	37
SJ 02140	303	118	07	H H	i-t				60	ō H
SJ 00689	30M		60	명* 대	m				iņ (p	EH
SJ 00690	30%		0.3	맥 근	m			0		
SJ 00882	BCM	113	60	함 근	m				0.0	5

00806 30K 30K 00389 30K 30K 00387 30K 30K 00387 30K 30K 00387 30K 30K 00387 30K 30K 01475 30K 30K 01484 30K 30K 01485 30K 30K 01486 30K 30K 01487 30K 30K 01486 30K 30K 01487 30K 30K 01488 30K 30K 01405 30K 30K 01406 30K 30K 01406 30K 30K 01406 30K 30K 01679 30K 30K 01679 30K 30K 01679 30K 30K 01667 30K 30K 01679 30K 30K 01671 30K 30K 01671 </th <th>\$3 00889</th> <th>30%</th> <th>112</th> <th>63</th> <th>eri</th> <th>63</th> <th></th> <th></th> <th></th> <th></th>	\$3 00889	30%	112	63	eri	63				
00739 30M 11M 07 1 4 3 6 00389 30M 11M 07 1 4 3 6 00389 30M 11M 07 1 4 3 6 00387 30M 11M 07 1 4 3 6 00387 30M 11M 07 1 4 3 6 00387 30M 11M 07 1 4 3 6 01376 30M 11M 07 2 3 6 6 0145 30M 11M 07 2 3 6 6 0145 30M 11M 07 3 3 6 6 0145 30M 11M 07 3 3 4 4 4 6 0146 30M 11M 07 3 3 3 4 4 2	0000	36%	11W	60	- -	(C)				20
00389 3CM 11M 07 1 4 3 53 00387 3CM 11M 07 1 4 3 53 00387 3CM 11M 07 1 4 3 55 00387 3CM 11M 07 1 4 3 55 00387 3CM 11M 07 1 4 3 55 0145 3CM 11M 07 2 3 3 4 0145 3CM 11M 07 2 3 4 4 0145 3CM 11M 07 2 3 4 4 0145 3CM 11M 07 3 3 4 4 0146 3CM 11M 07 3 3 4 4 0146 3CM 11M 07 3 4 4 4 0146 3CM 1		303	113	07	٠ ٦	m				ιŋ
00688 30N 11N 07 1 4 3 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 4 3 7 0 6 0		3CN	21W	03	H	33				
00358 30N 11N 07 1 4 3 61 00415 30N 11N 07 1 4 3 61 00415 30N 11N 07 1 4 3 60 01416 30N 11N 07 1 4 3 60 01405 30N 11N 07 2 4 4 60 01405 30N 11N 07 2 4 60 60 01405 30N 11N 07 2 4 60 60 01405 30N 11N 07 2 4 60 60 01405 30N 11N 07 3 3 60 60 60 01408 30N 11N 07 3 3 60 60 60 60 60 60 60 60 60 60 60 60 60		368	117	20	ä	43				ເນ
00397 30N 11W 07 1 4 3 56 00185 30N 11W 07 1 4 3 60 00186 30N 11W 07 1 4 3 60 03475 30N 11W 07 2 3 60 60 03465 30N 11W 07 2 3 60 60 03465 30N 11W 07 2 3 60 60 01468 30N 11W 07 2 3 60 60 01310 30N 11W 07 3 3 60 60 01468 30N 11W 07 3 3 60 60 01468 30N 11W 07 3 4 6 6 01468 30N 11W 07 3 4 6 6 01650 30N </th <th></th> <th>30%</th> <th>377</th> <th>r- 9</th> <th>ri.</th> <th>6</th> <th></th> <th></th> <th></th> <th>E)</th>		30%	377	r- 9	ri.	6				E)
00415 30M 11W 07 1 4 3 00748 30M 11W 07 1 4 3 03475 30M 11W 07 2 3 3 01475 30M 11W 07 2 3 4 01475 30M 11W 07 2 3 4 01452 30M 11W 07 2 4 4 01492 30M 11W 07 2 4 60 01492 30M 11W 07 3 3 60 01406 30M 11W 07		36N	318	0.3	41 FH	61				S
00387 3CN 11W 07 1 4 3 01475 3CN 11W 07 1 4 3 60 01475 3CN 11W 07 2 3 2 465 01475 3CN 11W 07 2 3 2 60 60 01455 3CN 11W 07 2 4 60 60 60 01172 3CN 11W 07 2 4 60 60 60 01172 3CN 11W 07 3 3 60		30M	BIT	0.1	м ч	E -				40
00748 30N 11W 07 1 4 3 01465 30N 11W 07 2 3 4 01465 30N 11W 07 2 3 4 01465 30N 11W 07 2 3 4 01455 30N 11W 07 2 3 4 01759 30N 11W 07 2 4 6 01304 30N 11W 07 2 4 6 01310 30N 11W 07 3 3 266272 2115520 44 0136 30N 11W 07 3 3 3 6 0146 30N 11W 07 3 3 3 4 0206 30N 11W 07 3 4 4 6 0216 30N 11W 07 4 4 4 6		3CM	318	64	٠ ا	3				
03271 30N 11W 07 2 3 01475 30N 11W 07 2 3 49 01475 30N 11W 07 2 3 49 01456 30N 11W 07 2 3 49 01492 30N 11W 07 2 3 60 01402 30N 11W 07 3 4 60 01402 30N 11W 07 3 4 60 02015 30N 11W 07 4 4 60 01406 30N 11W 07 4 4 60 01406 30N 11W 07 4		30N	118	01	н Н	23				
01475 30N 11W 07 2 3 4 49 01259 30N 11W 07 2 4 4 01259 30N 11W 07 2 4 60 01492 30N 11W 07 2 4 60 03794 POD1 30N 11W 07 3 1 3 60 03754 POD1 30N 11W 07 3 2 3 60 01172 30N 11W 07 3 3 3 60 01425 30N 11W 07 3 4 60 60 01426 30N 11W 07 3 4 60 60 01425 30N 11W 07 3 4 60 60 02005 30N 11W 07 3 4 60 60 02015 30N 11W 07 3 4 1 60 02015 30N 11W 07 4 1 1 60 01620 30N 11W 07 4 1 1 60 01621 30N 11W 07 4 1 1 4 01621 30N 11W 07 4 1 1 4 01621 30N 11W 07 4 1 1 4 60 01622 30N 11W 07 4 1 1 3 60 01623		30M	118	0.1	63	23				
03465 30N 11N 07 2 4 60 010259 30N 11N 07 2 4 26 01374 200 11N 07 3 3 26 60 01372 30N 11N 07 3 3 266 60 01360 30N 11N 07 3 3 266 60 01468 30N 11N 07 3 3 3 60 60 01468 30N 11N 07 3 4 60 60 01468 30N 11N 07 3 4 60 60 02005 30N 11N 07 3 4 60 60 01406 30N 11N 07 4 1 4 60 01406 30N 11N 07 4 1 3 4 60 0140		30N	118	07	£1	23				27
00259 30N 11W 07 2 4 01492 30N 11W 07 3 2 60 01172 30N 11W 07 3 2 60 01310 30N 11W 07 3 3 60 01464 30N 11W 07 3 3 60 01469 30N 11W 07 3 3 60 01469 30N 11W 07 3 3 60 01469 30N 11W 07 3 4 60 01469 30N 11W 07 3 4 60 60 0206 30N 11W 07 3 4 60 60 0146 30N 11W 07 4 4 60 60 0216 30N 11W 07 4 1 1 4 60 0167		30%	118	20	61	47			9	
01492 30N 11W 07 3 1 60 03794 Podd 30N 11W 07 3 1 80 94 01172 30N 11W 07 3 3 60 94 01484 30N 11W 07 3 3 60 60 01485 30N 11W 07 3 3 60 60 01485 30N 11W 07 3 3 60 60 01486 30N 11W 07 3 4 60 60 02006 30N 11W 07 3 4 60 60 0135 30N 11W 07 4 1 4 60 01620 30N 11W 07 4 1 4 60 01620 30N 11W 07 4 1 3 3 3 01620		30N	118	0.1	61				25	12
03794 POD1 30N 11W 07 3 266272 2119520 44 01.172 30N 11W 07 3 3 60 60 01.310 30N 11W 07 3 3 3 60 60 01.468 30N 11W 07 3 3 60 60 60 02.006 30N 11W 07 3 4 60 60 02.006 30N 11W 07 3 4 60 60 02.015 30N 11W 07 3 4 60 60 02.015 30N 11W 07 4 1 4 60 60 01.406 30N 11W 07 4 1 3 60 60 00.620 30N 11W 07 4 1 3 3 3 00.620 30N 11W 07 <th< th=""><th></th><th>30K</th><th>118</th><th>60</th><th>M</th><th></th><th></th><th></th><th>9</th><th>54</th></th<>		30K	118	60	M				9	54
01172 30N 11W 07 3 2 50 01484 36N 11W 07 3 3 60 60 01484 36N 11W 07 3 3 60 60 01425 36N 11W 07 3 4 60 60 60 02005 36N 11W 07 3 4 60 60 02015 36N 11W 07 3 4 60 60 0136 36N 11W 07 4 1 60 60 0160 36N 11W 07 4 1 4 60 60 01620 36N 11W 07 4 1 4 4 60 60 01620 36N 11W 07 4 1 3 3 4 4 4 4 4 4 4 4 4 <t< th=""><th>03794</th><th>30N</th><th>118</th><th>£0</th><th></th><th></th><th>6627</th><th>2119520</th><th>ሞ</th><th>127</th></t<>	03794	30N	118	£0			6627	2119520	ሞ	127
01310 3 ch 11W 07 3 3 61 01484 3 ch 11W 07 3 3 61 03630 3 ch 11W 07 3 4 61 01425 3 ch 11W 07 3 4 60 02006 3 ch 11W 07 3 4 60 02006 3 ch 11W 07 3 4 60 02015 3 ch 11W 07 3 4 60 00136 3 ch 11W 07 4 1 75 01136 3 ch 11W 07 4 1 75 0126 3 ch 11W 07 4 1 3 60 01679 3 ch 11W 07 4 1 3 4 4 01679 3 ch 11W 07 4 1 3 3 4 01679 3 ch 11W 07 4 1 3 4 4		30N	111	20	(c)	61			S)	30
01464 30N 11W 07 3 3 61 03630 30N 11W 07 3 4 61 68 01468 30N 11W 07 3 4 60 68 02006 30N 11W 07 3 4 50 60 60 02005 30N 11W 07 3 4 4 60 60 00136 30N 11W 07 4 1 7 1 1 60 60 00136 30N 11W 07 4 1 2 60		30%	113	20		_			0	20
03630 30N 11W 07 3 3 3 68 01425 30N 11W 07 3 4 55 50 02006 30N 11W 07 3 4 3 60 60 02015 30N 11W 07 3 4 4 55 50 02015 30N 11W 07 3 4 4 55 60 0135 30N 11W 07 4 1 55 50 01406 30N 11W 07 4 1 3 60 46 46 46 46 46 46 46 47		36%	113	03					et g	10
01425 30N 11W 07 34 55 02006 30N 11W 07 34 2 50 02006 30N 11W 07 34 3 50 02005 30N 11W 07 34 4 55 02015 30N 11W 07 41 1 60 00769 30N 11W 07 41 1 60 01679 30N 11W 07 41 3 60 01620 30N 11W 07 41 3 60 01621 30N 11W 07 41 3 60 01620 30N 11W 07 41 3 60 01621 30N 11W 07 41 3 60 01629 30N 11W 07 41 3 60 01667 30N 11W 07 4		30K	113	07	(r)	en			6 9	4
01468 30N 11W 07 3 4 60 02006 30N 11W 07 3 4 3 60 02484 30N 11W 07 3 4 3 75 02715 30N 11W 07 3 4 4 75 02715 30N 11W 07 3 4 4 66 0135 30N 11W 07 4 1 1 01679 30N 11W 07 4 1 3 46 01620 30N 11W 07 4 1 3 48 01621 30N 11W 07 4 1 3 63 01629 30N 11W 07 4 1 3 63 01667 30N 11W 07 4 1 4 4 01667 30N 11W 07 4 2 4 4 01667 30N 11W 07 4 3 4 4 01667 30N 11W 07 4 3 4 4 01667 30N 11W 07 4 3 4 4		36M	317	07	ы				រោ	ig G
02006 30N 11W 07 3 4 50 03484 30N 11W 07 3 4 55 02005 30N 11W 07 3 4 55 00135 30N 11W 07 4 1 60 01406 30N 11W 07 4 1 60 01620 30N 11W 07 4 1 3 60 01620 30N 11W 07 4 1 3 48 01620 30N 11W 07 4 1 3 48 01620 30N 11W 07 4 1 3 69 01621 30N 11W 07 4 1 3 63 01620 30N 11W 07 4 1 3 69 01667 30N 11W 07 4 3 4 <th></th> <th>30%</th> <th>311</th> <th>07</th> <th>G.</th> <th></th> <th></th> <th></th> <th>ΦΨ</th> <th>c.t</th>		30%	311	07	G.				ΦΨ	c.t
03484 30N 11W 07 3 4 3 75 02005 30N 11W 07 3 4 4 30N 11W 07 3 4 4 30N 11W 07 4 1 180 20 00135 30N 11W 07 4 1 34 4 4 36 66 20 01406 30N 11W 07 4 1 30N 11W 07 4 3 40 40 01667 30N 11W 07 4 3 4 3 40 40 40 40 01667 30N 11W 07 4 3 4 3 40 40 40 40 01667 30N 11W 07 4 3 4 3 40 40 40 40 40 01667 30N 11W 07 4 3 3 4 3 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 </th <th></th> <th>308</th> <th>TIM</th> <th>67</th> <th>G)</th> <th>2</th> <th></th> <th></th> <th>0.0</th> <th>401</th>		308	TIM	67	G)	2			0.0	401
022026 30N 11W 07 34 4 55 2 00135 30N 11W 07 4 1 60 2 00769 30N 11W 07 4 1 60 2 00736 30N 11W 07 4 1 45 1 00620 30N 11W 07 4 1 3 48 2 00620 30N 11W 07 4 1 3 48 2 00162 30N 11W 07 4 1 3 63 3 01620 30N 11W 07 4 1 3 63 3 01667 30N 11W 07 4 1 3 60 4 01667 30N 11W 07 4 3 2 40 1 00919 30N 11W 07 4		30N	111	60	G)	60			75	
02715 36N 11W 69 2 00135 36N 11W 67 4 1 180 2 0146 36N 11W 67 4 1 180 2 4 1 100 2 2 1 1 2 4 2 1 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 3 4 3 4 4 3 3 4 4 3 3 4 4 3 3 4 4 3 3 4 4 3 3 4 4 3 3 4 4 3 3 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		30%	312	07	G.	48"			S)	50
00135 30N 11W 07 4 1 120 2 0166 30N 11W 07 4 1 50 1 02936 30N 11W 07 4 1 45 1 00679 30N 11W 07 4 1 3 48 3 00329 30N 11W 07 4 1 3 63 2 00893 30N 11W 07 4 1 3 63 4 01667 30N 11W 07 4 1 3 60 4 01674 30N 11W 07 4 3 2 40 4 01667 30N 11W 07 4 3 2 40 1 00919 30N 11W 07 4 3 2 40 1 00604 30N 30N 30		30M	118	60	ы 4	4]°			69	20
00769 30N 11W 07 4 1 4 01406 30N 11W 07 4 1 4 02936 30N 11W 07 4 1 3 00679 30N 11W 07 4 1 3 01620 30N 11W 07 4 1 3 01621 30N 11W 07 4 1 3 01629 30N 11W 07 4 1 3 63 01667 30N 11W 07 4 1 4 4 01667 30N 11W 07 4 3 4 4 01601 30N 11W 07 4 3 4 4 01604 30N 11W 07 4 3 3 4 01604 30N 11W 07 4 3 3 4		301	MIL	60	7	_4			œ	C.I
01406 3CN 11W 07 4 1 45 1 02936 3CN 11W 07 4 1 3 3B 3B 00679 3CN 11W 07 4 1 3 4B 2B 00620 3CN 11W 07 4 1 3 4B 2B 00162 3CN 11W 07 4 1 3 63 2B 00162 3CN 11W 07 4 1 3 63 2B 00893 3CN 11W 07 4 2 4B 4B 4B 01667 3CN 11W 07 4 3 4B 4B 4B 4B 01404 3CN 11W 07 4 3 2 3CN 11W 07 4 3 2 4B		308	118	60	4	_4			000	다
02936 30N 11W 07 4 1 38 38 00679 30N 11W 07 4 1 3 4B 2 00620 30N 11W 07 4 1 3 63 3 00162 30N 11W 07 4 1 3 63 2 3 00893 30N 11W 07 4 2 45 2 45 2 01667 30N 11W 07 4 3 60 4 01404 30N 11W 07 4 3 40 1 00919 30N 11W 07 4 3 2 40 1 00604 30N 11W 07 4 3 2 40 1		308	MIT	20	7	_			a. ru	턴
00679 30N 11W 07 4 1 3 48 2 00620 30N 11W 07 4 1 3 52 3 3 00162 30N 11W 07 4 1 3 63 2 3 00162 30N 11W 07 4 1 3 63 2 3 00893 30N 11W 07 4 1 4 4 </th <th></th> <th>30N</th> <th>118</th> <th>20</th> <th>ব</th> <th>eri - 1</th> <th></th> <th></th> <th>38</th> <th>90</th>		30N	118	20	ব	eri - 1			38	90
00620 30N 11W 07 4 1 3 52 3 00329 30N 11W 07 4 1 3 63 58 00893 30N 11W 07 4 1 4 4 4 5 5 8 2 45 01667 30N 11W 07 4 2 4 3 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 6 4 7 4 1 4 4 5 5 6 4 6 4 5 5 6 4 6 4 6 4 7 4 1 4 4 5 5 6 4 6 4 6 4 7 4 1 4 4 5 5 6 4 6 4 7 4 1 4 4 7 4 1 4 4 5 5 6 4 6 4 6 4 7 4 1 4 4 1 4 4 2 5 4 6 4 7 4 1 4 4 2 5 4 1 4 4 2 5 4 1 4 4 2 5 4 1 4 4 2 5 4 1 4 4 2 5 4 1 4 4 2 5 4 1 4 4 2 5 4 1 4 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5 4 2 5		30N	117	20	4	en			д	64 64
00329 3CN 11W 07 4 1 3 63 2 00162 3CN 11W 07 4 1 3 58 2 02906 3CN 11W 07 4 1 4 4 4 4 45 2 01667 3CN 11W 07 4 2 8 6 4 4 4 2 4 4 2 4 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 3 4 2 4 3 4 2 4 4 2 4 4 3 4 3 4 4 3 4		30N	119	- 20	ব	ពា			52	_හ
00162 30N 11% 07 4 1 3 58 2 02906 30N 11% 07 4 1 4 4 4 45 2 00893 30N 11% 07 4 2 60 45 2 45 2 01667 30N 11% 07 4 3 4 3 41 2 40 4 00919 30N 11% 07 4 3 2 32 36 3 36 3 00604 30M 11% 07 4 3 2 32 36 3		30%	118	50	4	m			63	30
02906 3CN 11W 07 4 1 4 4 2 45 2 00893 3ON 11W 07 4 2 60 4 01667 3ON 11W 07 4 3 4 4 4 01404 3CN 11W 07 4 3 4 4 4 00919 3ON 11W 07 4 3 2 3E 4 06604 3ON 11W 07 4 3 2 3E 3E		30%	113	20	4 T				CD (Å)	23
00693 30N 11W 07 4 2 60 4 01667 30N 11W 07 4 3 4 3 41 2 01404 3CN 11W 07 4 3 40 1 1 00919 30N 11W 07 4 3 2 3E 3E 06604 3CN 11W 07 4 3 2 3E 3E		30N	118	0.3	4	el.				CI GI
01667 36N 11W 07 4 3 41 2 01404 3CN 11W 07 4 3 40 1 00919 30N 11W 07 4 3 2 35 36 06604 30N 11W 07 4 3 2 36 36		30M	118	20	4	10				94
01404 3CN 11W 07 4 3 40 1 00919 3CN 11W 07 4 3 2 3E 3 06604 3CN 11W 07 4 3 2 3E 3		36%	TIN	<u> </u>	च					23
000919 30N 11W 07 4 3 2 3E 2 00604 30N 11W 07 4 3 2 38 2		30%	MIT	17	4					in H
00604 30N 11W 07 4 3 2	0091	30N	317	20	er)					11
	- 1	303	113	5	त्युः स्था					til til

9 1 8 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 8 4 4 4 8 8 4 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10	ዕፅ ዓመር ዝ ጳክክ መርካ ተ		भ क्षाप् स्थान
117 117 300 117	ቁ ቁ ነጻ ነጻ ዕ ዕ ዕ ሮ ሮ መ የነ ቁ ጠ የነ መ የነ	लियातायाल क प्रकाषका क	ଜେବଜବନ ପ୍ର ଜେଜଜନନ ପ୍ର	
4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000000000000000000000000000000000000	ព្រហ្សេច ក្រុង ខេង១ ខ្លួយ ១៦ ១១ ១១ ១១ ១១ ១១ ១១ ១១ ១១ ១១ ១១ ១១ ១១	. 4 (1 10 m ១ ពោ លា លា (4

900 r	30%			ঝ	ന	
J 0091	O	115	04	4,	n	
7 009	30N			J,	m	
0156	36%			4	4	
SJ 00183	30K			Н	H	
031	30%	116		Н	\leftarrow 1	
J 034	368	115		H	পা	
വ	36%			64	r.t	
1	30N			ы	¢1	
19	308	119	80	64	e i	
J 019	368	-		el	C1	
18	30N	\vdash		¢1	cı	
SJ 03398		\vdash		¢1	c4	
5	30N	-		61	e1	
0.0	30M			61	e)	
5	30%	118		cı	ei	
ر ا	30K	211		¢4	cı	
SJ 00220	30%			61	CI	
р 0	30%			61	c1	
ם	SON			64	61	
9	SON	r-f		61	C1	
9	SON			¢4	C-1	
SJ 00228	30N	-1		C1	cı	
р О	3CN	-1		64	44	
SJ 03030	30%			C1	4	
2	30K	-1		¢4	ব্দ	
SJ 03378	SCN	TIM	90	¢1	-de	
9	BON	1		¢4	4	
ם	SON	\vdash	8	c1	7	
SJ 02293	SON	\vdash		Ç-1	٦'n	
SJ 00249	30M		8	C1	귝	
о 5	30%	115		m	C1	
J	30%	+-4		r	C1	
0	30N		ლ ©	r	61	
0	BCN		ω O	m	424	
0				m	-41	
SJ 02915	30%	113	90	r)	4	
0		1-1		m	প্র	
0	30%	H	Ö	ক	-1	
T D	368				-	

បានស្នេក ភេពស្	W - 1 - 1 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
ପ୍ରପ୍ର ଅକ୍ୟାସ		H I I I I I I I I I I I I I I I I I I I	11 20 10 20 20	កក្ឃស្ គេកបាកក
ល្លេល ជា ថា ចា ចា ស្	4 u u 4 u u u u 4 4 u u u H u m o u m m u u L o o			

J 0364	BOK			য	Н	(4
15	O.		0	ন্দ	-4	4
J 0331		Н		ক	H	431
J 0248	BON	118	(C)	ক	-4	=34
J 0226	30%	31M		ক	ന	Ŋ
\$3 03419	BON			ক	귝	C/J
J 022	BON	31W		r-I		
J 015	BON	H		a		
SJ 01585	BON	H	60	H	ы	
J 034	BON	117		H		+1
022	30N	118		H	Н	гđ
033	30N	11W		H	Н	N
032	30N	-4		Н	Н	m
037	BON	-		Н	Н	ពា
SJ 03342	30N		ψ.	H	Н	m
032	30N			Н	Н	<p< th=""></p<>
032	30N	118		М	Н	-qr
003	SON	115		4	C4	CV\$
004	30%	117		m	ci	m
011	BON	118		М	ന	
015	30K	-1		m	ന	
022	BOX	113		H	ന	e-1
030		-1		H	(r)	-1
024	30N	118	50	М	(T)	e-1
037	30X	3.1W		щ	m	-1
띪	SON			H	ল	-1
014	30%			e4	(r)	ø
023	30N	-		e1	m	N
J 034	308		90		ന	N
J 034		H		m	ന	e
007	BON			m	7	
029	30N	118	60	Ç 4	1	«p
032		\leftarrow	មា	¢4	C1	N
8	301			c1	m	N
031	30N	-		c 1	ന	eq
J 003	BON		φ O	¢4	m	N
019	SON	118	60	¢1	elle.	
J 025		118	90	¢1	-71	
J 022		118	90	c i	-111	c/I
J 003	30%	113	dh O	4		

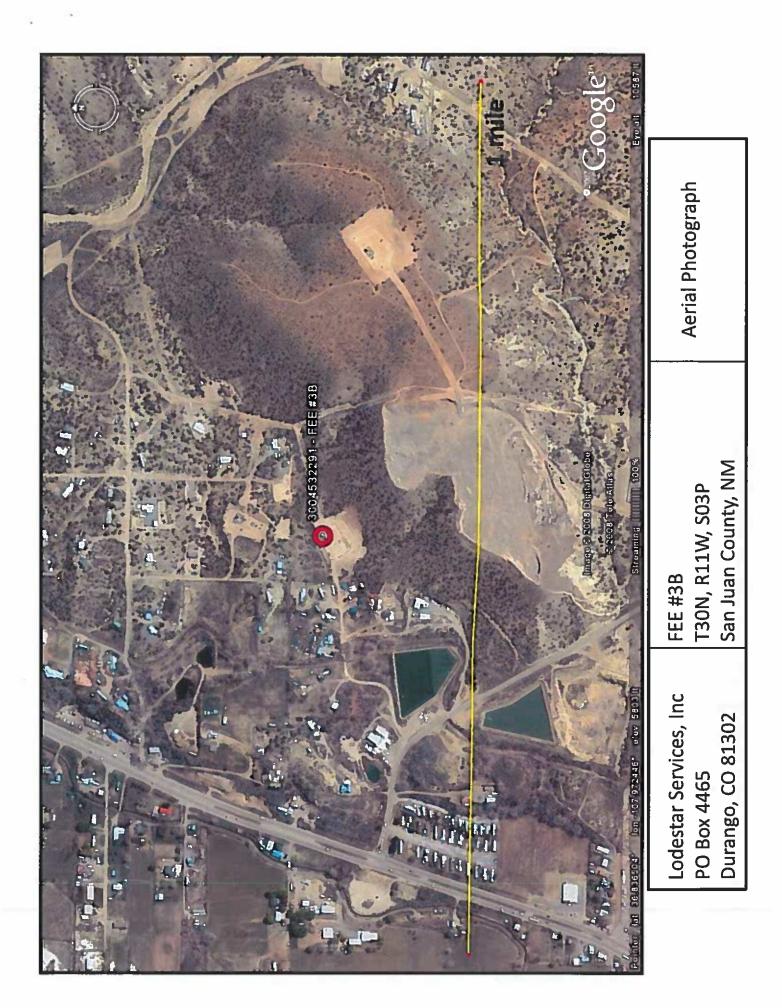
SJ 01436	30%	MIT	60	<u>م</u> ا				210	10	160
57 03471	303	TIM	ψ.	4. H	el			20	ın	12
SJ 03223	36%	MIT	ψ,	4. CI	2			en en	10	34
SJ 03263	30M	TIM	9	d.	64			63	33.	64 EB
SJ 03374	30M	11W	d) Q	ى ش	erf			44	ς1 τμ	13
5.7 02796	SON	228	60	ىڭ درى	64			100		
5.7 03214	36M	118	50	4. 4.	7			en un	63	30
	30N	113	60	4. ب	2			100		
SJ 02176	30N	118	10	ਦ ਦ				57	37	20
SJ 03356	30N	118	10	е е	et			ល	90	25
5.7 03258	36N	118	10	e e	ന			in in	0	iù iù
SJ 03444	BON	118	10	е гч	ମ			60		
5J 03248	BON	118	10	4	e			9	90	09
57 03354	BON	118	16	en H	en en			<u>а</u>	0 ल	08
SJ 00348	30M	118	10	4	44			72	451	4
SJ 03032	BON	MIE	10	च H	rl			8 0	90	0.0
SJ 02819	30%	31M	10	cı w	61			140	40	100
SJ 03282	BON	117	ů	c-i ca	캓			70	30	40
SJ 03281	BON	BIT	10	et et	4Jr			€2	en Ei	30
SJ 03572	30N	118	0	н Е	61			70		
SJ 03218	BON	118	10	က က	ന			50	30	20
01720	HOE	118	E =					225	90	98
	BON	118	13	H H	64			325	130	175
SJ 01693	30%	118	13	e e				225	ui ŋ	900
SJ 01672	30M	118	13	E E				180	00	100
SJ 01294	303	114	13	М Ч	m			55	U1 17	40
	BON	111	16	H H	33			46	មា	121
	30M	118	36	et et				r-I W	adı IÙ	91
	30%	118	H H	en H	r•1			ω O	40	07
	30%	118	16	ਦ ਦ	en			O O	40	07
	301	112	9	m H	C)			22	46	in m
SJ 03265	30M	118	16	en H	3			d) d)	70	20
SJ 03310	301	118	1 €	ල H	e			ເຄ ເກ	30	ເກ
SJ 01082	BON	318	9	c-1 C-1	rH			В	34	4
SJ 01722	30%	112	17	-1				20	ω	티
	BOK	112	17	다 다				26	01	Ħ
	30%	MIT	17	H H	en			0 (1)	en en	iù iù
SJ 01948	30M	TIM	17	е Н				E]	m	el El
02817	30%	71%	-3 -4	er H	cı			in et		
SJ 01722 PCD2	30%	212	-1	લ ન	4]t	266567	2116417	17	(T)	च्य ल

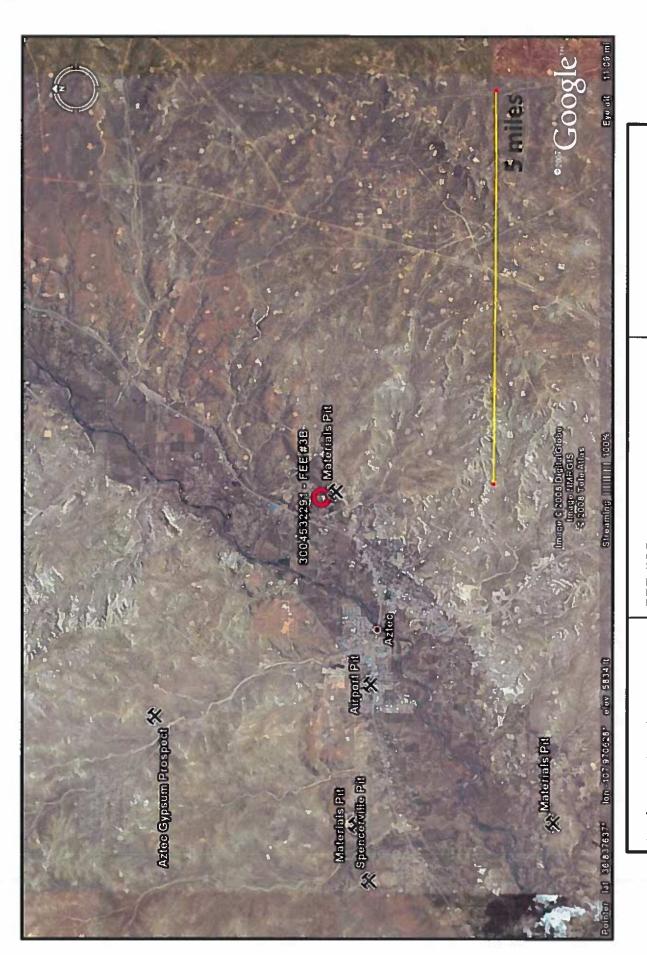
C.T 01899	200	200	-	c			,	ľ	ć
	BON	1 -	1 -		266911	211517	00	٠ (ړ	1 -
02750	NOC	٦,	۱,		i require		0 0	1 4,	• •
02249	200	118 13	4 -	7 Y	D D	네 -	1 U	ף כ	r 5
	200	1 -	1 -				0 6	4 C	r d
	NOE	1 -	1 -) C			י ר	H) I
	30N	119 17	161	יי			1 (U 5 41,	30	6.1 4.
	30N	-	¢1	H			28	14	4
	30N	Н	€1	jet H			2€	ເກ	21
	30N	Н	£4	m			44.	11	37
SJ 01057	30%	-4	٤4	(F)			63	28	38
SJ 01060	30%	11W 17	61	ന			(I)	23	32
	30%	Н	64	୯୨			75	20	មា
SJ 03269	30N	-	61	चा (ग)			0	0=1	70
	30N	Н	64	ᅗ			000	20	30
	30%	Н	¢4	(기 캠			€9	യ	30
	30N	H	ল	1			មា	ш	27
SJ 03276	30%		cts	1.4			€0	20	40
5J 01296	30N	Ħ	c	14			010	10	40
5J 03249	30M	H	(T)	61			U) ED	12	43
SJ 01810	30%		cs	ব			20	ď	30
SJ 00411	30M	-4	4				60	13.0	មា
	HOE	118 17	4	r#			co 44	60	ΞE
53 01847	30N	Н	4	н			30	ψ	11
	30N	H	শ্ব	2 1			52	18	34
SJ 00650	BOK	H	41				ወ	B T	te
SJ 02018	30M	118 17	-dı	61			100	40	09
	30N	11W 17	ď	e4			ர ம	ເກ	መ ጭ
	303	Н	ন				e e	el Tr	27
	30M	H	4				co Co	010	96
	30M	Н	~4				52	ιħ	44
SJ 01316	30K	113/ 18	c۱	1 3			4 E	12	34
	30%	Н	гH	1 3			52	61 61	30
SJ 02805	36N	Н	-1				60		
SJ 03463	BON	-	m				70	90	0 10
SJ 02996	BON	-	н				0.0	មា	iŋ CI
SJ 00932	3CM	11W 18	H				ci ci	15	7.1
	30M	=	н	(7)			33	ψ	7.00
	BON	ન	H	(r)			ហ	ιħ	100
SJ 01786	30N	11W 16	4	m			យ	9	en en

SJ 01401	BON	X	ш	-17	-			77	12	32
5J 03526	30%	MIT	e H	e H	ed			40		
SJ 03176	NOE	12.13 12.13 13.13	en H	ਜ ਜ	r1			40	20	CI
5.5 03177	363	MIT	ᇤ	ਕ ਜ	2			37	in el	KA KA
SJ 03344	30%	MIN	ᇤ	ਰਾ ਜ	2			100	αι	9
SJ 03801 PCD1	NOE	118	9	ei ei	20	266702	2116449	12	φ	5
SJ 03800 PCD1	30%	SIM	18	ra er		26671B	2116651	12	φ	in in
SJ 01639	NOE	TIM	쯦	GI GI	2			40	B	22
SJ 02098	MOE	117	ᇤ	य (1				61	r~	14
SJ 02109	BON	BIT	ᅋ	(1 (1				o rt	41	15
5J 02123	BON	TIM	16	य ()				22	ш	74
	BON	118	18	CI A	4.			40	10	30
57 02045	BON	119	æ	4				44 O C)	200	230
57 03322	SON	118	ᇊ	ব্য ব্য	ed.			40	10	30
SJ 03320	HOE	21W	18	ঝ	m			00		
SJ 03321	BON	31W	18	ব্য ব্য	m			0 8		
SJ 02193	NOE	TIM	15						105	
5.7 03403	30H	TIM	13	ਜ ਜ	2			400		
5.7 00638	3CM	117	15	e i				130	70	60
5J 01073	30M	119	19	el el				100	38	62
SJ 03615	30N	11W	19	rd Fd	rl			105	មា	76
SJ 03434	30N	113	19	핻	434			140		
SJ 03088	BON	111	51	е ец	egr			120	90	40
SJ 01636	30M	119	15	£4	~.			70	cı B	43
SJ 02862	BON	118	15	61 61	ന			0.5		
SJ 00284	3011	113	15	या स्थ				200	35	165
SJ 03645	BON	113	15	es es	ed.			60	20	40
SJ 03533	30M	113		en en	en .			20		
SJ 01621	30%	118	15	G CI				40	en en	14
SJ 02692	301	113	51	က (၂	2			52	12	40
SJ 02968	3CM	118	15	G CI	64			7.00	ហ	76
SJ 02812	30%	113	15	er er	61			0.0		
SJ 01123	3CN	312		T T				9	15	c.i
SJ 03437	30K	118		4	2			30		
	BON	21W		ল ক	2			60	4	(p
SJ 00284 CLW222415	363	11W	4	ক ক	2			200	:ი :ი	100
SJ 03224	3cN	118	30	ei ei	«P			Ф	30	30
SJ 03077	303	118	30	er CE	e-1			7	70	ιn
SJ 03668	30%	118		e i	ei,			900	280	200
SJ 03251	30%	113	61 61	G) Ali	«P			150	77	en L

.

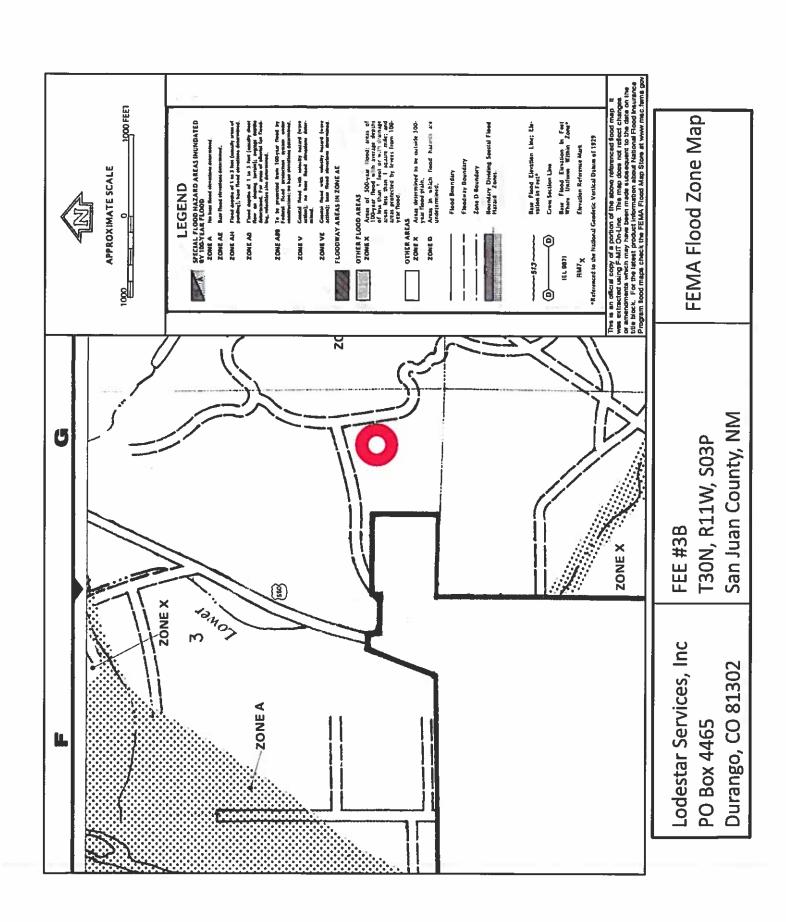
G





Lodestar Services, Inc
PO Box 4465
Durango, CO 81302
FEE #3B
T30N, R11W, S03P
San Juan County, NM

Mines, Mills, and Quarries Map



XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Design and Construction Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

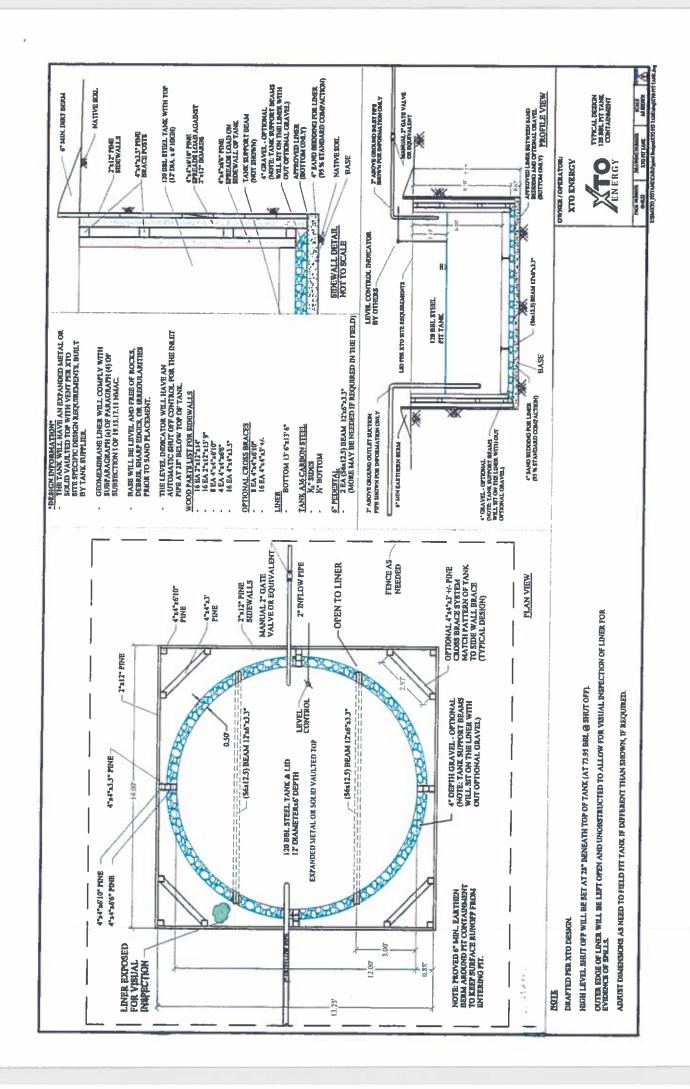
General Plan

- 1. XTO will design and construct below-grade tanks to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the existing well site operated by XTO where the existing below-grade tank is located. The sign will list the Operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
- 3. XTO is requesting approval of an alternative fencing to be used on below-grade tank locations. Below-grade tank locations will be fenced utilizing 48" steel mesh field-fence (hogwire) with pipe railing along the top. A 6' chain link fence will be utilized around the well pad if the well site is within a city limits or ¼ mile of a permanent residence, school, hospital, institution or church. Below-grade tanks located within 1000" of a permanent residence, school, hospital, institution or church will be fenced by 6' chain link fence with at least two strands of barbed wire at the top. All gates associated with below-grade tanks will remain closed and locked when responsible individuals are not on site.
- 4. XTO shall construct below-grade tanks with an expanded metal covering or solid vaulted top on the top of the below-grade tank.
- 5. XTO will ensure that below-grade tanks are constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight. Tanks will be constructed of A36 carbon steel with 3/16" sides and ¼" bottom. (See attached drawing).
- 6. The below-grade tank system will have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom. Sand bedding (4") will be placed on top of a level foundation to ensure prevention of punctures, cracks or indentations of the liner or tank bottom.
- 7. XTO will construct a berm and/or diversion ditch in a manner that prevents the collection of surface water run-on. Below-grade tanks will be equipped with automatic high level shut-off devices as well as manually operated shut-off valves. (See attached drawing).
- 8. XTO will construct and use below-grade tanks that do not have double walls. The below-grade tank sidewalls will be open for visual inspection for leaks. The sidewalls of the cellar will be constructed with 2" X 12" pine sidewalls and 4" X 4" pine brace posts. The below-grade tank

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Design and Construction Plan For Below-Grade Tanks Page 2

bottom will be elevated a minimum of 6" above the underlying ground surface and the below-grade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected. (See attached drawing).

- 9. XTO will equip below-grade tanks designed in this manner with a properly functioning automatic high-level shut-off control device and manual controls to prevent overflows. (See attached drawing).
- 10. XTO will demonstrate to the OCD that the geomembrane liner complies with the specifications of Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from OCD prior to the installation of the design. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidics and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A. (See attached drawing).
- 11. The general specifications for design and construction are attached.



XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.12 NMAC the following information describes the operation and maintenance of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

General Plan

- 1. XTO will operate and maintain below-grade tanks to contain liquids and solids, maintain the integrity of the liner and secondary containment system, prevent contamination of fresh water and protect public health and the environment. Fluid levels will be monitored weekly and high levels will be removed as necessary. Monthly inspections will be conducted to monitor integrity of below-grade tank systems and below-grade tanks will be equipped with automatic high-level shut-off devices.
- 2. XTO will not allow below-grade tanks to overflow and will use berms and/or diversion ditch to prevent surface run on to enter the below-grade tank. Below-grade tanks will be equipped with automatic high-level shut-off control devices as well as manually operated shut-off valves. See attached drawing for vault design and placement of diversion berms and shut-off devices.
- XTO will continuously remove any visible or measurable layer of oil from the fluid surface of below-grade tanks in order to prevent significant accumulation of oil.
 - 4. XTO will inspect the below-grade tank monthly and maintain written records for five years. Monthly inspections will consist of documenting the following: (see attached template),

Well Name

API#

Sec., Twn., Rng.

XTO Inspector's name

Inspection date and time

Visible tears in liner

Visible signs of tank overflow

Collection of surface run on

Visible layer of oil

Visible signs of tank leak

Estimated freeboard

- 5. XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High level shut-off devices control the freeboard at an average of 28" beneath the top of the tank.
- XTO will not discharge into or store any hazardous waste in any below-grade tank.
- If a below-grade tank develops a leak, or if any penetration of a below-grade tank occurs below the liquids surface, XTO will remove all liquids above the damage or leak line within 48 hours,

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks Page 2

notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the below-grade tank. If an existing below-grade tank does not meet current requirements of Paragraphs 1-4 of Subsection I of 19.15.17.11 NMAC the tank will be modified or retrofitted to comply. If compliance can not be achieved XTO will implement the approved closure plan.

		MONTH	ILY BELO	MONTHLY BELOW GRADE TANK INSPECTION FORM	INSPECTIC	N FORM		
Well Name:					API No.:	¢		
Legals	Sec:		Township:		Range:			
XTO	Inspection	Inspection	Any visible liner	Any visible sions of	Collection of	Visible laver	Any visible sing	Freedoord
Name	Date	Time	tears (Y/N)	tank overflows (Y/N)	run on (Y/N)	of oil (Y/N)	of a tank leak (Y/N)	Est. (ft)
				I I				
Notes:	Provide Det	Provide Detailed Description;	tion:			·		
	•							
Miss	•							
2016	•			į				
	•							
	•							
	•							
	•							
	s							

.

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

General Plan

- XTO will close below-grade tanks within the time periods provided in 19.15,17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
- 2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
- 3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
- 4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:

Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B

Soil contaminated by exempt petroleum hydrocarbons

Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes

Basin Disposal Permit No. NM01-005 Produced water

- 5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office has approved prior to removal. Any associated liners will be removed, properly cleaned and disposed of per 19.15.9.712 NMAC at San Juan County Landfill. Documentation of the final disposition will be included in the closure report.
- 6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
- 7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be

XTO Energy Inc.
San Juan Basin (Northwest New Mexico)
General Closure Plan
For Below-Grade Tanks
Page 2

analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.

- 8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
- 9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
- 10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally. The notification will include the following:
 - i. Operator's name
 - ii. Well Name and API Number
 - iii. Location by Unit Letter, Section, Township, and Range

The surface owner shall also be notified prior to the implementation of any closure operations of below-grade tanks as per the approved closure plan using certified mail, return receipt requested.

- 11. 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.
- 12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
- 13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service 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, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks Page 3

- All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
 - i. Proof of closure notice to division and surface owner;
 - ii. Details on capping and covering, where applicable;
 - iii. Inspection reports;
 - iv. Confirmation sampling analytical results;
 - v. Disposal facility name(s) and permit number(s):
 - vi. Soil backfilling and cover installation,
 - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable);
 - viii. Photo documentation of the site reclamation.

From: Lowe, Leonard, EMNRD

To: "Hixon, Logan"

Cc: McDaniel, James; Hoekstra, Kurt; Naegele, Otto; Farnsworth, Rex

Subject: APPROVED 2015-9-15 Request for Approved BGT Closure Plans Only

Date: Monday, September 28, 2015 11:38:00 AM

Importance: High

Mr. Hixon,

OCD approves the BGT closure via C-144 for the following:

-API: 30-045-34214

Well Name: Danburg Gas Com B 1Y, located in Section 21 (H), Township 30N, Range 12W,

San Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-31769

Well Name: Federal Gas Com H 3, located in Section 31 (C), Township 30N, Range 12W,

San Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-24016

Well Name: Fee 7, located in Section 7(H), Township 30N, Range 11W, San Juan County,

New Mexico Volume: 120 BBL

-API: 30-045-32291

Well Name: Fee 3B, located in Section 3(P), Township 30N, Range 11W, San Juan County,

New Mexico
Volume: 120 BBL

-API: 30-045-33415

Well Name: Fee 3C, located in Section 3(L), Township 30N, Range 11W, San Juan County,

New Mexico Volume: 120 BBL

-API: 30-045-33543

Well Name: Flog 5-4, located in Section 5(O), Township 29N, Range 13W, San Juan County,

New Mexico Volume: 120 BBL

-API: 30-045-30087

Well Name: Hancock Gas Com 2, located in Section 15(L), Township 30N, Range 12W, San

Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-31255

Well Name: Hare Gas Com C 1F, located in Section 25 (K), Township 29N, Range 10W, San

Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-34062

Well Name: Johnson Gas Com D 1F, located in Section 15 (B), Township 30N, Range 12W,

San Juan County, New Mexico

Volume: 120 BBL

Your approved C-144 is (are) located in the OCD imaging link below:

• Open link below:

http://ocdimage.emnrd.state.nm.us/imaging/default.aspx.

• Then select "WELL FILES"

Well Files

• Now enter your API Number.

Enter A	Pl Number	5
30-0	-	(example: 30-045-01234)
Sear	ch	

• Once the API number is entered, the site will display all "thumbnails" associated to this particular well. The C-144 will appear as follows. Click on the thumbnail to review. You may download the thumbnail if you choose to.



If you need assistance to find your C-144 you may contact me. My information is below.

Thank you and have a pleasant day!!

Leonard Lowe

Environmental Engineer [Environmental Bureau]

Oil Conservation Division

Energy Minerals and Natural Resources Department

1220 South St. Frances

Santa Fe, New Mexico 87004

Office: 505-476-3492 Fax: 505-476-3462

E-mail: leonard.lowe@state.nm.us

Website: http://www.emnrd.state.nm.us/ocd/

From: Hixon, Logan [mailto:Logan_Hixon@xtoenergy.com]

Sent: Tuesday, September 15, 2015 2:43 PM

To: Lowe, Leonard, EMNRD < Leonard.Lowe@state.nm.us>

Cc: McDaniel, James <James_McDaniel@xtoenergy.com>; Hoekstra, Kurt

<Kurt_Hoekstra@xtoenergy.com>; Naegele, Otto <Otto_Naegele@xtoenergy.com>; Farnsworth,

Rex <Rex_Farnsworth@xtoenergy.com>

Subject: 2015-9-15 Request for Approved BGT Closure Plans Only

Mr. Lowe

We are requesting an approved below grade tank closure plans only for the following sites:

Submitted: Our records show submittal of November 21, 2008 for the following sites:

-API: 30-045-34214

Well Name: Danburg Gas Com B 1Y, located in Section 21 (H), Township 30N,

Range 12W, San Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-31769

Well Name: Federal Gas Com H 3, located in Section 31 (C), Township 30N,

Range 12W, San Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-24016

Well Name: Fee 7 , located in Section 7(H), Township 30N, Range 11W, San

Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-32291

Well Name: Fee 3B, located in Section 3(P), Township 30N, Range 11W, San

Juan County, New Mexico

Volume:

120 BBL

-API: 30-045-33415

Well Name: Fee 3C, located in Section 3(L), Township 30N, Range 11W, San

Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-33543

Well Name: Flog 5-4, located in Section 5(0), Township 29N, Range 13W, San

Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-30087

Well Name: Hancock Gas Com 2, located in Section 15(L), Township 30N, Range

12W, San Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-31255

Well Name: Hare Gas Com C 1F, located in Section 25 (K), Township 29N, Range

10W, San Juan County, New Mexico

Volume: 120 BBL

-API: 30-045-34062

Well Name: Johnson Gas Com D 1F, located in Section 15 (B), Township 30N,

Range 12W, San Juan County, New Mexico

Volume: 120 BBL

Thank you for the help.

If you have any questions or concerns do not hesitate to contact me at anytime. Thank you and have a good day!

Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | 72 Suttle Street, Suite J | Durango, CO 81303 | ph: 970-247-7708 | Cell: 505-386-8018

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Logan_Hixon@xtoenergy.com