<u>District 1</u>
1625 N. French Dr., Hobbs, NM 88240
<u>District II</u>
1301 W. Grand Avenue, Artesia, NM 88210
<u>District III</u>
1000 Rio Brazos Road, Aztec, NM 87410
<u>District IV</u>
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 permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Type of action: X 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 hability 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.
Operator Dugan Production Corp. OGRID# 006515
Address 709 East Murray Drive, Farmington, New Mexico 87401
Facility or well name Federal I Com #102S
API Number: 30-045-35013 OCD Permit Number
API Number: 30-045-35013 OCD Permit Number: U/L or Qtr/Qtr I Section 12 Township 29N Range 14W County. San Juan County
Center of Proposed Design: Latitude 36.74038 N Longitude 108.25630 W NAD. 1927 ▼ 1983
Surface Owner: Federal State X Private Tribal Trust or Indian Allotment
7
Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary. X Drilling Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☑ Lined ☐ Unlined Liner type. Thickness 20 mil ☑ LLDPE ☐ HDPE ☐ PVC ☐ Other
Line: Seams: Welded Factory Other Volume 600 bbl Dimensions: L 76' x W 13' 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: Thicknessmil LLDPE HDPE PVC Other
Liner Seams
Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volumebbl 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: Thicknessmil
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

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)					
Four foot height, four strands of barbed wire evenly spaced between one and four feet					
X Alternate. Please specify 4' Hogwire					
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					
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 acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.					
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes 🗓 No				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes 🗵 No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo, Satellite image	☐ Yes ☒ No ☐ NA				
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site: Aerial photo: Satellite image	☐ Yés ☐ No ☑ NA				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - IWATERS database search: Visual inspection (certification) of the proposed site	☐ Yes X 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	X 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 X 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 19.15.17.11 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 Previously Approved Design (attach copy of design) API Number 30-045- 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: 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 14 15 15 17 18 18 19 19 19 19 19 19
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
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

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground S Instructions: Please indentify the facility or facilities for the disposal of liquids, difacilities are required.					
• .	Disposal Facility Permit Number				
•	Disposal Facility Permit Number				
/ill 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) \(\subseteq \text{No} \)					
Required for impacted areas which will not be used for future service and operation. Soil Backfill and Cover Design Specifications based upon the appropriate in Re-vegetation Plan - based upon the appropriate requirements of Subsection I Site Reclamation Plan - based upon the appropriate requirements of Subsection	equirements of Subsection H of 19.15.17.13 NMAC of 19 15 17.13 NMAC				
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the control provided below. Requests regarding changes to certain siting criteria may require considered an exception which must be submitted to the Santa Fe Environmental ademonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for	administrative approval from the appropriate distr Bureau office for consideration of approval. Justiy	ict office or may be			
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 No			
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			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant (measured from the ordinary high-water mark). - Topographic map: Visual inspection (certification) of the proposed site	ficant watercourse or lakebed, sinkhole, or playa	Yes X No			
Within 300 feet from a permanent residence, school, hospital, institution, or church i Visual inspection (certification) of the proposed site, Aerial photo; Satellite i		☐ Yes ☒ No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring - NM Office of the State Engineer - iWATERS database, Visual inspection (co	ring, in existence at the time of initial application.	Yes X No			
Within incorporated municipal boundaries or within a defined municipal fresh water adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality: Written approval	·	X 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 a	and Maneral Division	Yes X No			
Within an unstable area. - Engineering measures incorporated into the design, NM Bureau of Geology Society: Topographic map	& Mineral Resources, USGS; NM Geological	☐ Yes ☒ No			
Within a 100-year floodplain FEMA map		Yes X No			
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Siting Criteria Compliance Owner Notice - based upon the appropriate requirements of Siting Criteria Compliance Owner Notice - based upon the appropriate of a drying particle Construction/Design Plan of Temporary Pit (for in-place burial of a drying particle Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Siting Confirmation Sampling Plan - based upon the appropriate requirements of Siting Soil Cover Design - based upon the appropriate requirements of Subsection I Re-vegetation Plan - based upon the appropriate requirements of Subsection I Site Reclamation Plan - based upon the appropriate requirements of Subsection I	rements of 19.15.17 10 NMAC Subsection F of 19 15.17.13 NMAC ropriate requirements of 19.15 17 11 NMAC f) - based upon the appropriate requirements of 19 17 13 NMAC rements of Subsection F of 19 15 17.13 NMAC ubsection F of 19.15.17 13 NMAC fl cuttings or in case on-site closure standards cannot of 19.15.17.13 NMAC of 19.15.17.13 NMAC	5.17 11 NMAC			

Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accumulate the property of the	Title. Vice President, Exploration
Name (Print) Kurt Fagrelius	Tille vice Plesident, Exploration
Signature Kurl Tegrelin	Date August 24, 2009
e-mail addresskfagrelius@duganproduction.com	Telephone 505-325-1821(o), 505-320-8248 (H)
OCD Approval: Permit Application (including closure plan) Closure	Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date: _ 5/44 /10
Title: Enviro/spee	OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the closure plan prior plan has been obtained and the closure plan prior plan plan prior plan plan plan plan plan plan plan plan	to implementing any closure activities and submitting the closure report. the completion of the closure activities. Please do not complete this losure activities have been completed.
	Closure Completion Date:
Closure Method: Waste Excavation and Removal On-Site Closure Method Alterr If different from approved plan, please explain.	native Closure Method
Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, dra two facilities were utilized. Disposal Facility Name Disposal Facility Name	Disposal Facility Permit Number
Were the closed-loop system operations and associated activities performed on one of the second year. 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 operated Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	tions:
Closure Report Attachment Checklist: Instructions: Each of the following is 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 Longi	tudeNAD1927 1983
75 Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requires	
Name (Print):	·
Signature	
a mail address:	Tolophopu

District I 1625 N French Dr., Hobbs, NM 88240

1301 W Grand Avenue, Artesia, NM 88210

State of New Mexico Energy, Minerals & Natural Resources Department

District III 1000 Rio Brazos Rd. Aztæc. NM 87410

1220 S St Francis Dr. Santa Fe. NM 87505

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

Revised October 12, 2005 Instructions on back Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

Form C-102

AMENDED REPORT

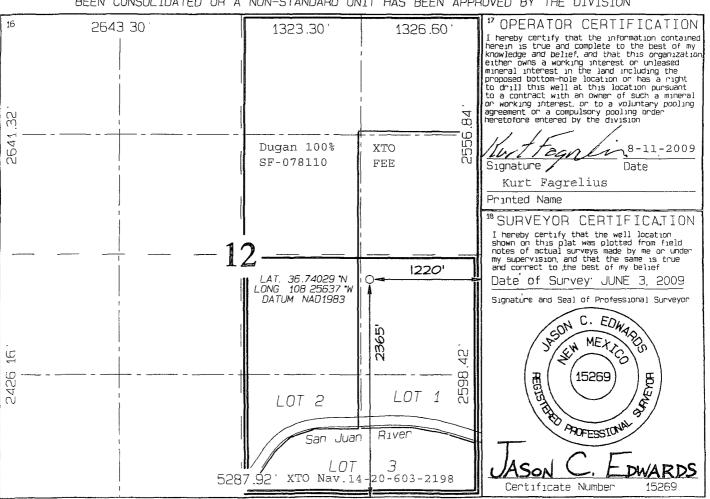
WELL LOCATION AND ACREAGE DEDICATION PLAT

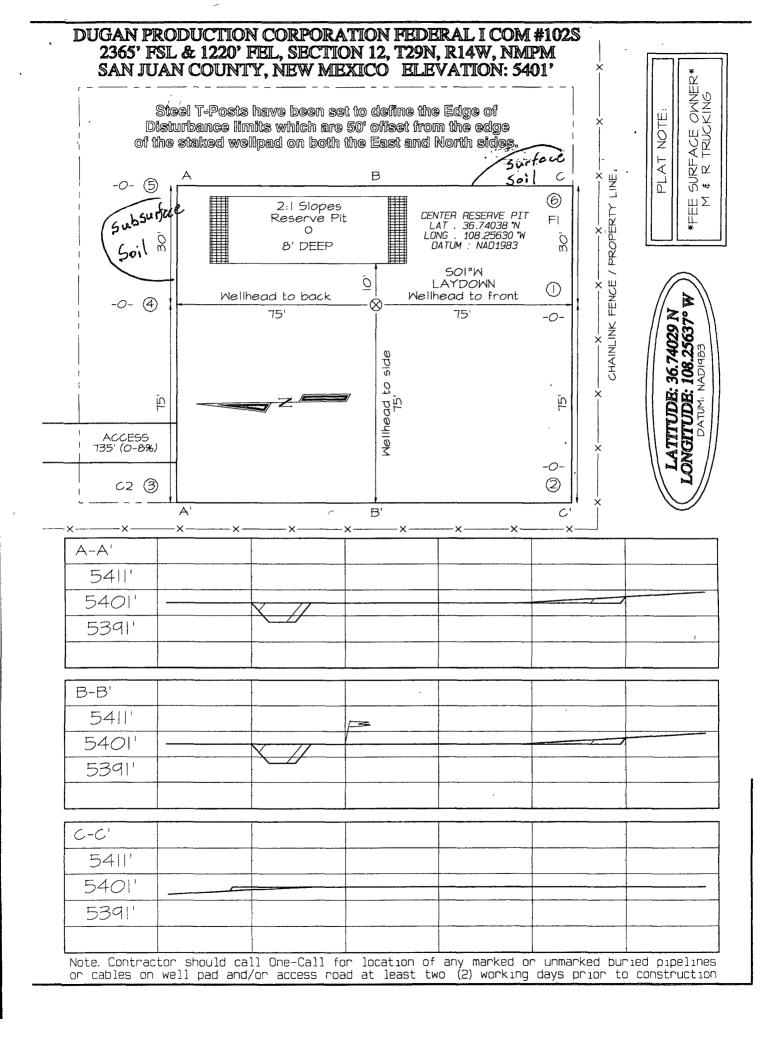
1. Hats 4 ""快点头"。

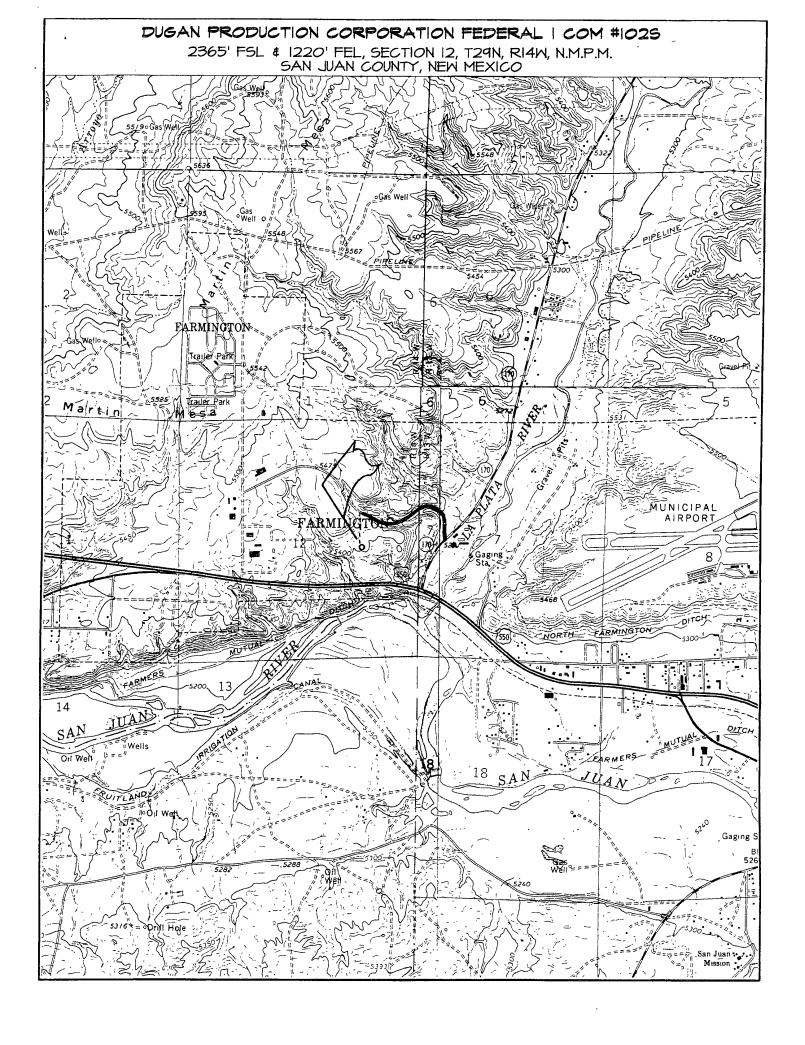
'API Number	Pool Code Pool Name					
	78160 / 71629	HARPER HILL FRUITLAND SAND PICTURED	CLIFFS / BASIN FRUITLAND COAL			
*Property Code		°Property Name FEDERAL I COM	°Well Number 102S			
70GRID No 006515		*Operator Name DUGAN PRODUCTION CORPORATION	*Elevation 5401			

¹⁰ Surface Location Feet from the UL or lot no Sect ion Township Range Lot Idn North/South line Feet from the East/West_line County 29N 14W 2365 1220 EAST NAUL NAZ Ι 12 SOUTH ¹¹Bottom Hole Location If Different From Surface Township Feet from the UL or lot no Sect ion Feet from the North/South line East/West line County ¹³ Joint or Infill ¹⁴ Consolidation Code 12 Dedicated Acres ¹⁵ Order No 160.0 Acres (SE/4) - PC (E/2) - FC320.0 Acres

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







Federal I #102S Hydrogeologic Report

The Federal L#102S is located within the Farmington city limits on the northwest margin of the San Juan Basin, in San Juan County, New Mexico. The area is characterized as an arid, sparsely vegetated surface of Kirtland Shale on a bluff overlooking (200-feet above) the San Juan River Valley (1/4-mile south) and the La Plata River Valley (1/2-mile east).

A records search of the NM Office of the State Engineer –iWATERS database was conducted on a three square mile area centered on the Federal I #102S location (Exhibit 2). Six water wells and eight exploration wells were located. The closest water well is 2,100 to the southwest in the San Juan River Valley (total depth 32-feet, depth to water 20-feet). The other five water wells are further than ½-mile away; they are shallow (total depth 12-60 feet, top of water 4-20 feet) and are located in either the San Juan or La Plata river valleys. There is not any information indicating if the eight exploration wells were ever drilled. The proposed (?) wells are further than 1-mile away and are located in the San Juan River valley. The results of the search are shown on Exhibit 1.

The main source of stock water in the region is encountered in valley-fill deposits in existing arroyos and the San Juan River and La Plata river valleys at shallow depths of approximately 5-20 feet below the surface. In the arid areas away from the river valleys, there are stock ponds constructed on surface shale at the confluence and upper reaches of arroyos. The below grade tank is not located in an arroyo; the closest arroyo is 500-feet to the southwest. This arroyo and others nearby, drain to the east into the La Plata River or the south into the San Juan River and have breeched the surface down to over 200-feet (Exhibit 2) (See Visual Inspection Certification).

The Kirtland Shale extends from the surface down to a depth of approximately 665-feet. The interval is comprised of an upper shale member, middle sandstone member (Farmington Ss.) and a lower shale member. The upper member extends from surface to 80-feet and is comprised of mudstone / shale with a trace of siltstone. The middle member extends from 80-370 feet and contains several thin (5-10 feet thick), discontinuous silty sands that could contain a minimal amount of poor quality ground water. However, the interval is breeched to a depth of 200-feet, \(\frac{1}{2}\)-miles to the south and east. The lower member extends from 370 to 665-feet and is comprised of mudstone / shale with few thin stringers of siltstone.

There is Fruitland sand (920-950), coal (1020-1030 and 1040-1060) and the Pictured Cliffs Sandstone (1065-1200) that contain groundwater but they also contain natural gas and the water quality is poor. Water analyses on this interval are available from Dugan Production upon request.

Based on electric open hole logs, the iWATERS database and literature reviewed, depth to ground water ranges from 15 – 30 feet below the surface in major arroyos in the area and 10-15 feet below the surface in the San Juan and La Plata river valleys. Moving away from the arroyos and rivers, depth to ground water drops rapidly to greater than 200 feet below the surface. At the location of the below grade tank, lesser amounts of poor quality ground water might be found at a depth of approximately 200-370 feet from thin, discontinuous sand stringers in the middle sandstone member of the Kirtland Shale. Larger quantities of poor quality ground water could be expected from Fruitland sand at 950-950 feet and the Fruitland Coal and Pictured Cliffs Sandstone interval at around 1020-1200 feet below the surface.

This Hydrogeologic Report was prepared by Mr. Kurt Fagrelius, Geologist for Dugan Production. Mr. Fagrelius has been employed as a geologist for Dugan for the past 31-years, received a MS in Geology from NMIMT in Socorro, NM and a BS in Geology from FLC in Durango, CO.

- Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.
- Brown, D.R., and Stone, W.J., 1979, Hydrogeology of Aztec quadrangle, San Juan County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrogeologic Sheet 1.
- Levings, G.W., Craigg, S.D., Dam, W.L. Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S. Geological Survey, Atlas HA-720-A, Sheet 1 and 2.
- Thorn, C.R., Levings, G.W., Craigg, S.D., Dam, W.L., and Kernodle, J.M., 1990, Hydrogeology of the Ojo Alamo Sandstone in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S.G.S, Atlas HA-720-B, Sheet 1 and 2.



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

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

•		(quarter	rs a	re sı	nalle	st to	large	est) ·	(NAD83 UTN	,		(In feet)	
*	Sub		Q	Q	Q 1			•	A Section 1		Depth D	epth W	/ater
POD Number	basin Use	County	64	16	4 Se	c Ť	ws	Rng	Χ	Y	Well W	/aterCo	lumn
SJ 00080	EXP	SJ	2	2	4 1	4 2	29N	14W	207796	4069451*	60		
SJ 00081	EXP	SJ	1	2	4 1	4 2	29N	14W	207596	4069451*	60		
SJ 00082	EXP	SJ	3	4	2 1	4 2	29N	14W	207603	4069649*	60		
SJ 00083	EXP	SJ	4	4	2 1	4 2	29N	14W	207803	4069649*	60		
SJ 00084	EXP	SJ	3	3	2 1	4 2	29N	14W	207185	4069653*	60		
SJ 00085	EXP	SJ	4	3	2 1	4 2	29N	14W	207385	4069653*	60		
SJ 00086	EXP	SJ	2	3	2 1	4 2	29N	14W	207385	4069853*	60		
SJ 00087	EXP	SJ	1	3	2 1	4 2	29N	14W	207185	4069853*	60		
SJ 03416	DOM	SJ		2	2 1	3 2	29N	14W	209348	4070088*	60	10	50
SJ 03538	DOM	SJ	2	2	1 1:	3 2	29N	14W	208641	407,0225*	20	4	16
SJ 03776 POD1	DOM	SJ	3	1	1 1:	3 2	29N	14W	208062	4070000	12	6	6
SJ 03784 POD1	DOM	SJ	4	3	4 1:	2 2	29N	14W	208210	4070365	32	20	12
									Aver	age Depth t	o Water:	10 fe	et
										Minimur	n Depth:	4 fee	et

Record Count: 12

PLSS Search:

Section(s): 1, 2, 11, 12, 13, Township: 29N Range: 14W

14

Maximum Depth:

20 feet

Siting Criteria for the Federal I Com #102-S

- 1. Ground water is not less than 50-feet below the bottom of the temporary pit. Ground water is greater than 100-feet below the bottom of the temporary pit.
- 2. The temporary pit is not within 300-feet of a continuously flowing water course, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from ordinary high water mark). See the attached Topographic map (Exhibit 2) and Visual Inspection Certification of the location and area around the subject temporary pit.
- 3. The temporary pit is not within 300-feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. See the attached Satellite Image (Exhibit 3) and Visual Inspection certification of the location and area around the subject temporary pit.
- 4. The temporary pit is not within 500-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. See the attached NM Office of the State Engineer iWATERS database search (Exhibit 4) and Visual Inspection certification of the location and area around the subject temporary pit.
- 5. The temporary pit is located within the incorporated municipal boundaries but not within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978 Section 3-27-3, as amended. See the attached Topographic map of the location and area around the subject temporary pit, the Visual Inspection Certification and Request for Administrative approval..
- 6. The temporary pit is not located within 500-feet of a wetland. See the attached Topographic map and Visual Inspection Certification of the location and area around the subject temporary pit.
- 7. The temporary pit is not located within the area overlying a subsurface mine. See the attached Mine, Mills and Quarry Map of New Mexico (New Mexico, EMND 2008) (Exhibit 5) showing the location and area around the subject pit.
- 8. The temporary pit is not located within an unstable area. See the attached Topographic map of the location and area around the subject temporary pit.
- 9. The temporary pit is not located within a 100-year floodplain area. See the attached FEMA map (Exhibit 6) of the 100 year floodplain showing the location and area around the subject pit.

Federal I Com #102-S Visual Inspection Certification

I, Kurt Fagrelius, Vice President of Exploration for Dugan Production Corp. 709 East

Murray Drive, Farmington, New Mexico hereby certify that I or persons under my direct

supervision, prepared the attached exhibits and conducted a Visual Inspection of the

location and area around the Federal I Com #102-S temporary pit (July 10, 2009).

The location of the Federal I Com #102-S temporary pit is not in full compliance with

all siting criteria and standards for temporary pits established by the State of New

Mexico, Energy Minerals and Natural Resources Department 19.15.17.10 NMAC. The

temporary pit is located within the municipal boundaries of the City of Farmington, New

Mexico.

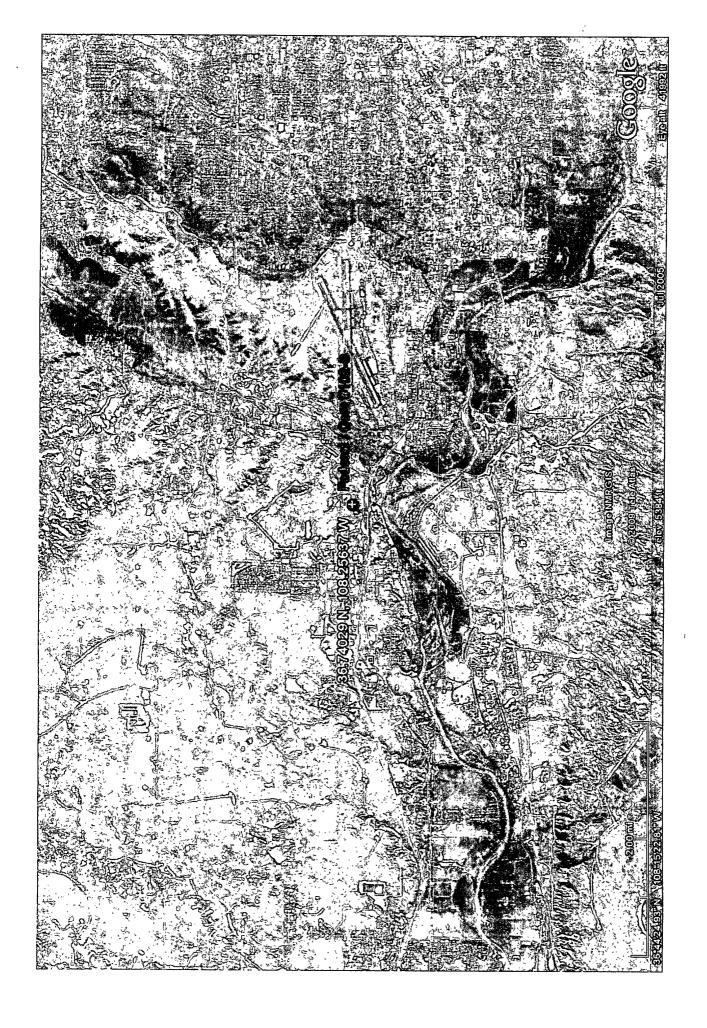
Although this temporary pit does not meet the siting criteria in 19.15.17.10 NMAC, it

will be approved by the City of Farmington.

Kurt Fooroling

<u>July 23, 2009</u>

Date







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

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

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

(In feet)

Sub

QQQ

12

POD Number

DOM

basin Use County 6416 4 Sec Tws Rng

4 3 4 12 29N 14W

Depth Depth Water Well WaterColumn

SJ 03784 POD1

208210

32 20

4070365 Average Depth to Water:

20 feet

Minimum Depth: 20 feet

Maximum Depth: 20 feet

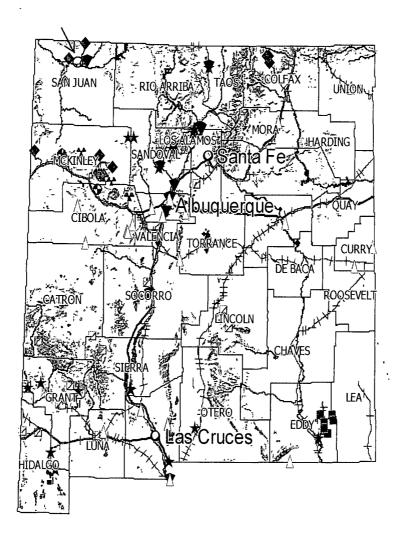
Record Count: 1

PLSS Search:

Section(s): 12

Township: 29N

Range: 14W



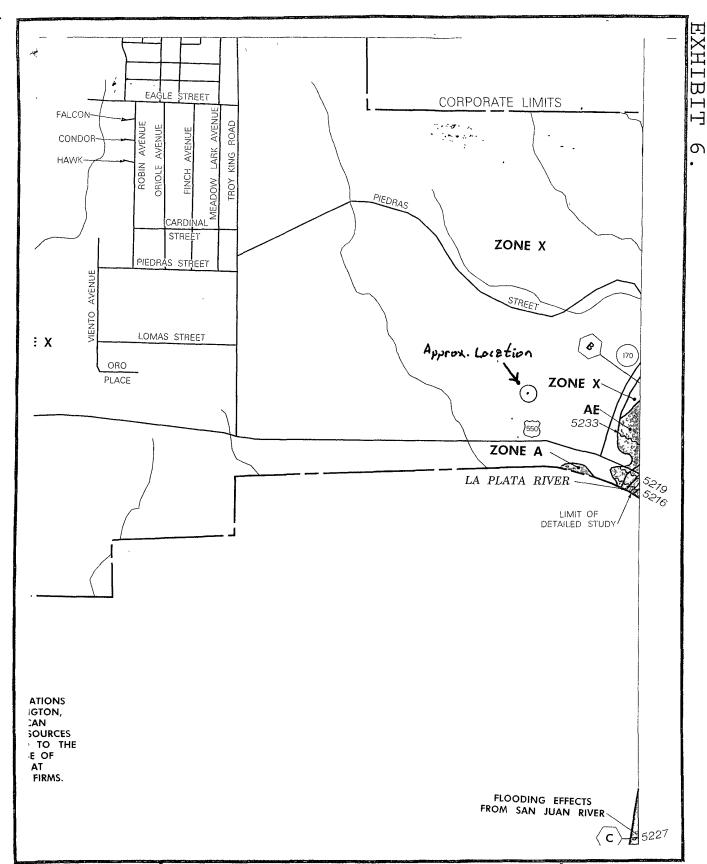
Mine, Mills and Quarry Map of New Mexico

Dugan Production Corp.

Federal I Com #102-S

Taken from the New Mexico Energy, Minerals and Natural Resources Department.

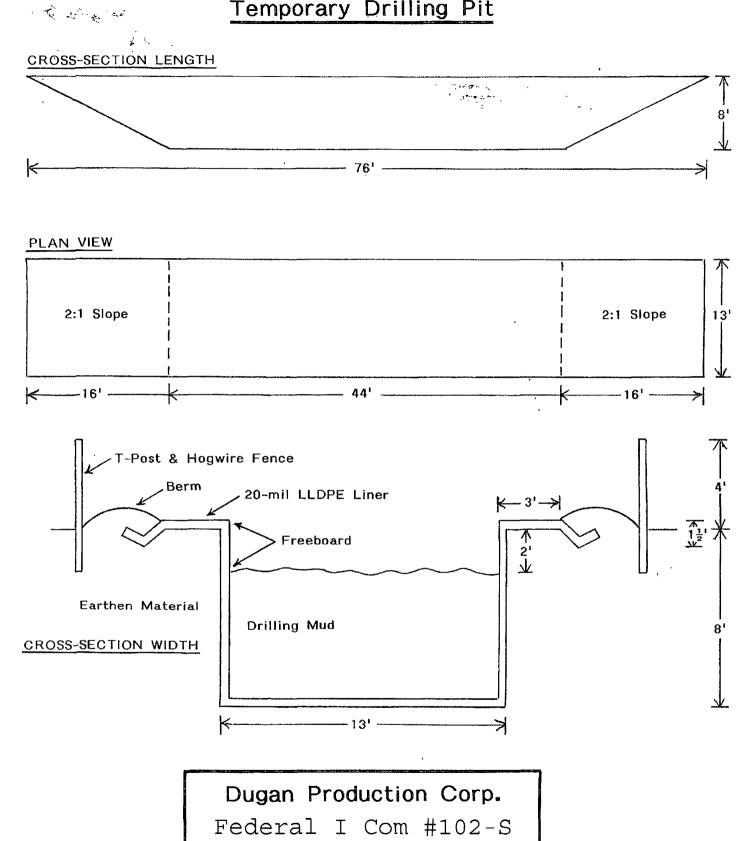
Mining and Minerals Division.



FEMA 100-Year Floodplain Map

Federal I Com #102-S

Temporary Drilling Pit



Federal I Com #102-S Request for Administrative Approval

Administrative approval is hereby requested for an alternative to the slope requirement (2H:1V), fencing design and steel marker to be set at the center of burial site following on-site pit closure for the Federal I Com #102-S temporary pit. Also, administrative approval is requested for the temporary pit to be located within the municipal boundaries of the City of Farmington, New Mexico.

The requests for administrative approval cited above are needed to help minimize environmental impact and increase safety and protect wildlife and public health. The alternatives proposed will protect fresh water, public health, safety and the environment more effectively than the design and construction specifications established by the State of New Mexico, Energy Minerals and Natural Resources Department do in rule 19.15.17.10 and 11 NMAC.

1. The proposed alternative pit design would have 2H: 1V slopes on two ends and vertical walls in the middle (Exhibit 7). The maximum depth of the pit would be 8-feet, never exceeding 6-feet of drilling fluid with at least 2-feet of freeboard. This pit size, depth and design (developed over the last 30+-years) is the best design (enabling separation of cuttings and mud) for the small water well rig and mud pump that will be used to drill the subject well. Based on the small size of the pit and larger size of liner installed, there will not be any vertical strain on the liner. In the event someone falls into the pit they will be able to exit the pit using the 2H: 1V slopes on either end of the pit (spaced 40-feet apart), using a rope ladder located at the midpoint on the far side of pit or by climbing up the suction or discharge lines on the rig side of the pit.

The existing rule (19.15.17.11.F.2) would require the operator to build a temporary pit that has 2H: 1V slopes on all four sides. To achieve the minimum depth and width needed for proper separation of cuttings and mud (8-feet deep, 13-feet wide, 6-feet of mud and 2-feet of freeboard) the width of the pit required under the existing rule would have to be doubled (13-feet wide proposed design, 45-feet wide under the existing rule). The larger pit size required under the existing rule would require the pad size to be increased from the current 105-feet by 150-feet (0.36 acres) to 150-feet by 150-feet (0.52 acres). The larger pit size required under the existing rule would require a doubling of mud volume (600-bls proposed design, 1200-bls existing rule) to operate properly and would have to be disposed of once the temporary pit is closed. Also the larger pit size required under the existing rule would require a larger liner (102' X 42' proposed design, 102' X 60' existing rule) and would have to be disposed of once the temporary pit is closed. The proposed alternative temporary pit design is needed so that the optimum size and design can be constructed which will also minimize the impact on the environment.

The proposed temporary pit will be constructed and operated in a safe manner to prevent contamination of fresh water and protect public health and the environment.

2. The proposed alternative fencing design will include T-posts spaced 10-feet apart with 3-T-posts on each end. T-posts will be located outside of the liner apron and burial trench. Hog-wire / field fence 4-feet in height will be strung tightly and anchored to the top and bottom of each T-post. Small holes (3" high X 6" wide) in the hog-wire will be located at ground level with increasing larger holes (up to 7" high X 6" wide) located at the top of the fence. Anchor braces will be put at all four corners to strengthen and

tighten the fence. During drilling or work-over operations, there will be no fence adjacent to the rig. However, the ends of fence will be attached to the front and rear of rig when responsible personnel are

not on-site. Once the rig is moved off, the third side of fence will be constructed in the same manner. This fence design (developed over the last 30-years) has proven to be very effective controlling unauthorized access to temporary drilling pits.

The existing rule (19.15.17.11.D.3) would require the operator to fence the temporary pit with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between on foot and four feet above the ground level. The proposed fencing alternative would provide better security against unauthorized access to temporary drilling pits. The smaller holes in hog-wire (3" X 6" up to 7" X 6") is more effective at controlling unauthorized access by the public and wildlife than 4-strands of barbed wire spaced 12" apart.

The proposed fence around the temporary pit will be constructed and operated in a manner that prevents unauthorized access and shall maintain the fence in good condition to protect the public and wildlife.

3. The proposed alternative steel marker set at the center of the on-site burial following onsite-pit closure will be a flat steel marker. The marker will be (24" X 24") and will have the operator name, lease name, well number, location (UL, Sec., Twp., Rge.) and that it designates an "on-site burial location" lettering welded on the top side with a 4" threaded collar welded to the bottom side. The marker will be set at ground level and attached to a 4" diameter pipe that is cemented in a hole three feet deep. When the well is abandoned, a steel riser that is 4" in diameter, extending 4' above the ground will be welded to the pipe anchored in cement below the surface. The riser will have lettering welded on side showing operator name, well number, location (UL, Sec., Twp., and Rge.) and that it designates an on-site burial location.

The existing rule (19.15.17.13.F.1.d) would require the operator to install a 4" diameter steel marker a minimum 3' deep in cement and extending at least 4' above ground. The proposed steel marker alternative would be much safer than the existing rule. The steel marker will be located approximately 15-20 feet from the well head. A marker that stands 4' tall would present a safety hazard for personnel and vehicle traffic working around the well-head.

4. The proposed temporary pit is located within the municipal boundaries of the City of Farmington, New Mexico. The location meets all other siting requirements for temporary pits and is approved by the City of Farmington. In the interest of safety, the operator and drilling contractor request administrative approval of the temporary pit. In the event of an unexpected gas kick or blow-out, a pit with sufficient volume (600-bls) of mud is necessary to circulate out gas, contain produced fluids and mix kill mud in.

The requests for administrative approval cited above are needed to help minimize environmental impact, increase safety and protect wildlife and public health. The alternatives proposed will protect fresh water, public health, safety and the environment more effectively than the design and construction specifications established by the State of New Mexico, Energy Minerals and Natural Resources Department do in rule 19.15.17.11 NMAC.

Federal I Com #102-S Operational Requirements

- 1. The Federal I Com #102-S temporary pit will be maintained and operated in accordance with the following requirements:
- 2. Recycle, re-use, reclaim or dispose of fluids in a manner approved by the NMOCD rules.
- 3. Drilling fluids will be transferred to the next temporary (drilling reserve) pit to be used again in drilling the next well. Free fluid that shakes out of mud will be transferred to the Dugan operated Sanchez O'Brien SWD #1 disposal well.
- 4. Do not dispose of solid waste, trash, debris or hazardous material into the pit.
- 5. If the pit liner becomes torn or damaged, notify the appropriate NMOCD district office within 48-hours and repair or replace and remove all liquid above leak (505) 334-6178. If a hole or tear occurs below the fluid level, call the NMOCD office within 24-hours.
- 6. All injection or withdrawal of liquids from a pit using a water truck will be done through a header, diverter or other device that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.
- 7. Discharge line from pit and suction lines to mud pumps will be equipped with smooth flanged fittings and hoses to prevent damage to the pit liner.
- 8. BOP manifolds will be constructed, installed and staked down in a manner that prevents damage to the pit liner.
- 9. Temporary pit will be constructed and operated in a manner that prevents surface water from entering the pit. Diversion berms will be constructed along the upslope sides of pit.
- 10. Oil absorbent booms or other devices to contain and remove oil from pit's surface will be kept onsite until final pit closure.
- 11. Discharge only fluids generated during drilling or work-over operations into the pit.
- 12. Immediately following drilling or work-over operations, remove any oil from pit surface.
- 13. Maintain at least 2-feet of freeboard in pit at all times.
- 14. Keep log book of daily inspections during drilling and work-over operations.
- 15. Keep log book of weekly inspections after rig is moved off, until final pit closure.
- 16. Note date of drilling or work-over rig release on form C-105 or C-103.

Federal I Com #102-S Design and Construction Plan

- 1. The Federal I Com #102-S temporary pit will be designed and constructed in accordance with the following requirements:
- 2. Temporary pit will be designed and constructed to contain-liquids and solids and prevent contamination of fresh water and protect public health and the environment.
- 3. Stockpile topsoil prior to digging pit, keep separate from subsoil and use as final cover and fill when closing pit.
- 4. Sign-12" by 24" with operator name, lease name, well #, location (unit letter, qtr/qtr, Sect., Twp., and Rge.) and emergency phone #'s will be posted on location. Sign will be posted in a location where it can be easily read.
- 5. Fencing around the Federal I Com #102-S temporary pit will be constructed and operated in a manner that prevents unauthorized access and shall be maintained in good condition to protect the public and wildlife. Federal I Com #102-S temporary pit is not located within 1000 feet of house, school, hospital or church. Administrative Approval is requested for alternative design (4'-hogwire). See attachment.
- 6. Federal I Com #102-S temporary pit will be designed and constructed to ensure the confinement of liquids and prevent unauthorized releases. Pit will be constructed with a firm foundation and interior slopes, smooth and free of rocks or sharp edges. Administrative Approval is requested for alternative design (2H: 1V slopes on 2-sides, vertical on 2-sides). See attachment.
- 7. Liner will be 20-mil string reinforced LLDPE, impervious material, resistant to UV light, hydrocarbons, salt, acidic or basic liquids. Liner seams will be minimized, oriented up and down, not across slopes, will have factory seam welds. Construction methods to avoid excessive stress-strain on the liner will be used. Geo-textile will be used under the liner as needed to reduce localized stress-strain on the liner in order to prevent punctures or tears in the liner.
- 8. Anchor trenches for the liner will be at least 18-inches deep.
- 9. A header, diverter, smooth flanged fittings or other devices that prevent damage to the liner by fluid force or mechanical damage at any point of discharge into or suction from the pit will be used.
- 10. Diversionary berms, ditches or sloping will be constructed as necessary to prevent surface run-off from flowing into pit.

Federal I Com #102-S Closure Plan-Methods, Procedures and Protocols

- 1. Comply with siting criteria for temporary pits established by the State of New Mexico, Energy Minerals and Natural Resources Department 19.15.17.10 NMAC.
- 2. Provide the NMOCD district office at least 72-hours notice but no greater than 1 week prior to any closure operations. Notice will include operator name, well name and number, API number, and location (unit letter, section, township and range).
- 3. Provide the surface owner notice of the operator's proposal of an on-site closure method. Proof of notice will be attached to the permit application. Also, proof of closure notice will be provided by certified mail to surface owner after closure. Proof of notice will be attached to final closure report.
- 4. Remove all liquid from pit and reclaim, re-use or dispose of at an NMOCD approved facility. Upon completion of drilling operations, drilling mud will be vacuumed from pit and transported to the next reserve pit for re-use at another drilling location. After the remaining mud settles, the free water that shakes out and any free water left over from completion operations will be hauled to the Dugan Production operated Sanchez O'Brien #1 SWD located 1650 feet from the South line and 990 feet from the West line (Unit L) of Section 6, Township 24 North, Range 9 West NMPM, San Juan County, New Mexico. The disposal facility was permitted by the NMOCD with Administrative Order SWD-694.
- 5. Remove all fluids from temporary pit within 30-days and close within 6-months following release of drilling rig.
- 6. Air dry pit contents and stabilize or solidify to a load bearing capacity sufficient to support the temporary pit's final cover.
- 7. Collect a five point, composite sample of the pit contents to demonstrate that Benzene, BTEX, the GRO and DRO combined fraction, TPH. and chlorides (depth to groundwater from bottom of pit is greater than 100-feet), do not exceed the standards as specified in 19.15.17.9.B or the background concentration, whichever is greater.

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

- 8. Other methods if the standards in 19.15.17.9.B can not be met will include: The pit contents may be mixed to a ratio not to exceed 3:1, un-contaminated soil or other material to pit contents. A second five point, composite sample of the contents after treatment or stabilization will be taken to demonstrate that the contents do not exceed the standards. If the second soil analyses do no satisfy the closure standards, the operator will close the temporary pit using the waste excavation and removal method.
- 9. Cut pit liner off at the mud line (solids level); remove liner and apron and transport to

- a NMOCD approved facility for disposal.
- 10. Stockpiled sub-surface soil will be used to backfill pit and re-contour well pad (to a final or intermediate cover that blends with the surrounding topography). A minimum of four feet of compacted, non-waste containing, earthen material will be used as backfill.
- 11. Stockpiled surface soil will be used as a cover over the backfilled pit and disturbed areas of the well pad no longer needed for production operations. The soil cover will include either the background thickness of top soil or one foot of suitable material to establish vegetation at the site whichever is greater.
- 12. The area will be re-seeded as per BLM guidelines. Re-seeding will be repeated until 70% of the native natural cover is achieved and maintained for two successive growing seasons. The first growing season after the pit is closed the disturbed area will be re-seeded. The seeding method will be to drill on contour whenever possible.
- 13. The NMOCD will be notified once successful re-vegetation has been achieved.
- 14. A steel marker will be set at the center of the on-site burial following onsite-pit closure (see application for administrative approval). The marker will be (24" X 24") and will have the operator name, lease name, well number, location (UL, Sec., Twp. and Rge.) and that it designates an "on-site burial location" lettering welded on the top side with a 4" threaded collar welded to the bottom side. The marker will be set at ground level and attached to a 4" diameter pipe that is cemented in a hole three feet deep. When the well is abandoned, a steel riser that is 4" in diameter, extending 4" above the ground will be welded to the pipe anchored in cement below the surface. The riser will have lettering welded on side showing operator name, well number, location (UL, Sec., Twp., and Rge.) and that it designates an on-site burial location.
- 15. Closure Report will be submitted 60-days after re-seeding.
- 16. A deed notice identifying the exact location of the on-site burial will be filed with the County clerk in the county where the on-site burial occurs.

CITY OF FARMINGTON FINDINGS OF FACT, CONCLUSIONS OF LAW and FINAL DECISION PETITION SUP 10-02 - SPECIAL USE PERMIT

REQUEST:

Petition SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #102S gas well located in the IND, Industrial District on Lot 1 of the Maxey Hills Subdivision south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway.

PUBLIC PARTICIPATION:

- Publication of Notice for this public hearing appeared in the Daily Times on Thursday, January 28, 2010. Adjoining property owners were sent notice by certified mail on Friday, January 29, 2010 and a sign was posted on Friday, January 29, 2010.
- B. The petitioner was present at the Planning and Zoning Commission hearings and spoke in favor of the petition. The property owners where the well site will be located sent letters of support to the Community Development Department.
- C. The petitioner was present at the Oil and Gas and Geologic and Engineering Hazards Advisory Commission hearings and spoke in favor of the petition.

SUMMARY OF RELATED FACTS:

The Property

Lot 1 of the Maxey Hills Subdivision Location

NE 1/4, SE 1/4, Section 12, Township 29 North, Range

14 West.

Physical Characteristics Cleared, leveled, fenced storage yard. Terrain slopes

to the south and east outside the yard.

Existing Land Use

Storage yard.

Existing Zoning

IND, Industrial District.

Surrounding Zoning and Land Use

North:

IND. Industrial District - Vacant

South: ...

LNC, Local Neighborhood Commercial District - Vacant

East:

IND. Industrial District - Vacant

West:

IND, Industrial District - Vacant

Project Description

The petitioner is requesting a special use permit to drill and operate the Federal I Com #102S gas well. The well is a new, co-mingled Fruitland Coal and Pictured Cliffs gas well drilled to 1220 feet of total depth.

The well site is located in a storage yard south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway. The well site will be accessed from Piedras Street.

The proposed production facilities are a wellhead and pumping unit with a gas motor and a gas meter. Gas and produced water will be piped off-site in the right-of-way of Piedras Street to the Federal I #9 gas well operated by the petitioner. From that point, the gas and water pipelines will tie into the existing Tabor Gathering System operated by the petitioner. The gas and water pipelines for this well will have an operating pressure of approximately 30 p.s.i.g. and 70 p.s.i.g. respectively.

The drilling and completion of the well will occur during daylight hours only.

The Community Development Department has received two letters of support for the petition from the surface owners, M&R Trucking, Inc.

Oil, Gas and Geothermal Drilling in the UDC

Table 2.3 of the City of Farmington's Unified Development Code (UDC) requires a special use permit for oil, gas and geothermal drilling operations, subject to use standards of Section 2.4.36 of the UDC. These use standards require that proposals for all such operations be referred to the Oil and Gas and Geologic and Engineering Hazards Advisory Commission and that such uses shall comply with Operational Performance Standards of Section 5.11 of the UDC.

This petition will be referred to the Oil and Gas Commission upon action of the Planning and Zoning Commission. The operation of the proposed well site will be required to maintain operational standards regarding noise, visible emissions, hazardous toxic and noxious material, vibration, open storage, glare, outdoor lighting and screening.

Chapter 19, Farmington City Code

The petitioner has requested a variance to allow an earthen pit lined with impervious material to contain non-hazardous circulating fluid during the drilling phase. The petitioner also has requested a variance to use an above-ground steel water tank to store produced water until the well is completed. According to FCC 19-1-5, such pits or tanks may be used prior to completion of the well. However, the pits and tanks must be of impervious material as approved by the state, pumped out, dried, covered and leveled to previous grade within 30 days of completion of the well. The above-ground tanks shall also comply with FCC 19-3-11, Storage tanks, including a maximum height of 12 feet.

A second exit gate for a well site is required according to FCC 19-3-10(a)

Issues

City Engineer

Improvements to Piedras Street require at minimum a base course road 24 feet wide. Paving is recommended. If Piedras Street is paved, a paved apron to the site needs to be installed at minimum 24-feet wide and 50-feet long.

 The utility easement is on a slope above the road and the pipeline would preclude widening of Piedras. Please confirm the location and depth of the pipeline with the City Engineer.

Chief Building Official

• Building permits are required for fencing around the well sites. Building permits need to be obtained before construction begins on any fencing.

Fire Department

- The access road must be 20 feet wide with an all-weather driving surface.
- The site must be fenced upon completion with 6-foot chain link and 2 strands of barbed wire according to FCC 19-3-10.

Police Department

 Safety fencing of an appropriate nature should be required to restrict access to the completed site. Recommend a 6 foot chain-link topped with appropriate deterrent to climbing or circumvention of the fencing.

Planning Department

- This well site location is not within 300 feet of any principal use buildings or within 75 feet of a street.
- Excavation of Piedras Street for the gas and water pipelines must be approved by the City Council and the plans approved by the City Engineer according to FCC 19-2-72.
- The all-weather driving surface required shall extend across the storage yard to the well site (not just to the gate of the storage yard in which the well site is located).
- An address will need to be assigned to the well site.

FINDINGS:

- 1. The applicant is proposing to drill and operate the Federal I Com #102S gas well completed to the Pictured Cliffs and Fruitland Coal formations with a total depth of 1,220 feet.
- 2. The well site is on property owned by M&R Trucking, who has provided letters of support for the petition to the Community Development Department.
- 3. The property is zoned IND, Industrial District. The IND, Industrial District requires a special use permit for oil and gas well drilling, according to Table 2.3 of the UDC
- 4. According to FCC Section 19-3-4, drilling is restricted to daylight hours for wells of less than 5,000 feet of depth.
- 5. There are no principal use buildings within 300 of the well site.
- 6. The proposed production equipment includes a wellhead and a gas meter in the northwest corner of the well site. Gas and produced water will be piped from the site.

- 7. The pipelines from the well site are proposed to be in the right-of-way of Piedras Street, a public street owned by the City of Farmington. The new pipelines are proposed to be constructed to run from the well site to the Federal I #9 gas well operated by the petitioner. The gas pipeline will have a pressure of 30 p.s.i.g. The produced water pipeline will have a pressure of 70 p.s.i.g. According to FCC 19-2-72, excavation in a City right-of-way for water or gas pipelines shall be allowed only by written permission of the City Council. Construction plans and descriptions must be approved by the city engineer.
- 8. The petitioner is required to enter into a written agreement for use of the City's right-of-way, and this agreement shall include the compensation to be paid by the petitioner to the City.
- 9. Proposed access to the well site is from Piedras Street. The city engineer initially recommended paving of Piedras Street, or a minimum improvement of a 24-foot wide all-weather base course road for the well site access.
- 10. An all-weather base course road 20 feet wide was initially required to provide emergency vehicle access to the well site from Piedras Street across the storage vard to the well site.
- 11. Due to the width the existing roadway on Piedras Street, a base course road 18 feet wide is the largest width that can be built without significant earth work being required. The access road from the gate of the storage yard to the gate of the well site shall be 18 feet wide as well.
- 12. The improvements to Piedras Street shall be constructed from the end of the paved portion of Piedras Street to the gate of the storage yard in which the well site is located.
- 13. The petitioner is requesting the City's permission to use an open reserve pit lined with impervious material during the drilling phase. According to NM State Statute, to drill a well with an open reserve pit (as opposed to using tanks as pits) a driller must receive written permission from the municipality in which the well will be drilled.

PLANNING AND ZONING COMMISSION ACTION of February 25, 2010:

Motion was made by Commissioner Joyce Cardon, seconded by Commissioner Lonnie Moffett to approve Petition SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #102S gas well located in the IND, Industrial District on Lot 1 of the Maxey Hills Subdivision south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway.

AYE: Chairman Shields and Commissioners Bird, Buchanan, Byrom, Cardon, Ivie, Moffett and Simpson

NAY: None

ABSTAINED: None

ABSENT: Commissioners Kuchera and Williams

THE MOTION PASSED 8-0

OIL AND GAS COMMISSION ACTION of March 9, 2010:

Motion was made by Commissioner Elliott Riggs, seconded by Commissioner John Thompson, to approve Petition No. SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #102S gas well located in the IND, Industrial district on Lot 1 of the Maxey Hills Subdivision, south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway, including a recommendation to allow water and gas pipelines from the well site to be placed in the City right-of-way of Piedras Street.

AYE: Commissioners Hanson, Riggs and Thompson

NAY: None

ABSTAINED: None

ABSENT: Commissioner Simmons

THE MOTION PASSED 3-0

CITY COUNCIL ACTION OF April 13, 2010:

City Council adopted the Planning and Zoning and the Oil and Gas Commissions' Action Summary and <u>approved</u> Petition SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #102S gas well located in the IND, Industrial district on Lot 1 of the Maxey Hills Subdivision, south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway, subject to conditions a through d as follows:

- a. that the petitioner shall improve the roadway of Piedras Street with an 18-foot wide gravel base course road from the end of pavement of Piedras Street to the well site;
- b. that the City will allow the use of an open reserve pit during drilling which is to be lined with impervious material;
- c that the City grants permission to place water and gas pipelines from the well site in the City right-of-way of Piedras Street to connect to the petitioner's existing water and gas pipeline system, with plans for the pipeline to be approved by the city engineer; and
- d. that the petitioner shall enter into a written agreement for the use of the City's right-of-way in Piedras Street and that the agreement shall include compensation to be paid by the petitioner to the City.

Approved this 13th day of April 2010.

ATTEST:

Tommy Roberts, Mayor

Dianne Fuhrman, City Clerk

LEGAL DEPARTMENT

APPROVED.ASTO FORM



dugan production corp.

ROVD MAY 6 OIL COMS. D

Mr. Brandon Powell New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

Re: City of Farmington Findings of Fact for Federal I Com #102S temporary pit.

Hello Brandon, I have enclosed a copy of the City of Farmington's Findings of Fact for Federal I Com #102S gas well located within the Farmington City limits.

In accordance with the siting requirements for temporary drilling pits (19.15.17.10, A., (1) (e), Dugan Production is providing the NMOCD the approval received from the City of Farmington to construct, operate and close (according to NMOCD guidelines) a temporary drilling pit for the referenced well.

Please attach this document to the Temporary Pit application (C-144) submitted to your office on August 4, 2009.

If you have any questions or require additional information, please contact me.

Sincerely,

Kurt Fagrelius VP Exploration

Dugan Production Corp.

CITY OF FARMINGTON FINDINGS OF FACT, CONCLUSIONS OF LAW and FINAL DECISION PETITION SUP 10-02 – SPECIAL USE PERMIT

REQUEST:

Petition SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #102S gas well located in the IND, Industrial District on Lot 1 of the Maxey Hills Subdivision south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway.

PUBLIC PARTICIPATION:

- A. Publication of Notice for this public hearing appeared in the Daily Times on Thursday, January 28, 2010. Adjoining property owners were sent notice by certified mail on Friday, January 29, 2010 and a sign was posted on Friday, January 29, 2010.
- B. The petitioner was present at the Planning and Zoning Commission hearings and spoke in favor of the petition. The property owners where the well site will be located sent letters of support to the Community Development Department.
- C. The petitioner was present at the Oil and Gas and Geologic and Engineering Hazards Advisory Commission hearings and spoke in favor of the petition.

SUMMARY OF RELATED FACTS:

The Property

Location Lot 1 of the Maxey Hills Subdivision

NE 1/4, SE 1/4, Section 12, Township 29 North, Range

14 West.

Physical Characteristics Cleared, leveled, fenced storage yard. Terrain slopes

to the south and east outside the yard.

Existing Land Use

Storage yard.

Existing Zoning

IND, Industrial District.

Surrounding Zoning and Land Use

North:

IND, Industrial District - Vacant

South:

LNC, Local Neighborhood Commercial District - Vacant

East:

IND, Industrial District – Vacant

West:

IND, Industrial District - Vacant

Project Description

The petitioner is requesting a special use permit to drill and operate the Federal I Com #102S gas well. The well is a new, co-mingled Fruitland Coal and Pictured Ciffs gas well drilled to 1220 feet of total depth.

The well site is located in a storage yard south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway. The well site will be accessed from Piedras Street.

The proposed production facilities are a wellhead and pumping unit with a gas motor and a gas meter. Gas and produced water will be piped off-site in the right-of-way of Piedras Street to the Federal I #9 gas well operated by the petitioner. From that point, the gas and water pipelines will tie into the existing Tabor Gathering System operated by the petitioner. The gas and water pipelines for this well will have an operating pressure of approximately 30 p.s.i.g. and 70 p.s.i.g, respectively.

The drilling and completion of the well will occur during daylight hours only.

The Community Development Department has received two letters of support for the petition from the surface owners, M&R Trucking, Inc.

Oil, Gas and Geothermal Drilling in the UDC

Table 2.3 of the City of Farmington's Unified Development Code (UDC) requires a special use permit for oil, gas and geothermal drilling operations, subject to use standards of Section 2.4.36 of the UDC. These use standards require that proposals for all such operations be referred to the Oil and Gas and Geologic and Engineering Hazards Advisory Commission and that such uses shall comply with Operational Performance Standards of Section 5.11 of the UDC.

This petition will be referred to the Oil and Gas Commission upon action of the Planning and Zoning Commission. The operation of the proposed well site will be required to maintain operational standards regarding noise, visible emissions, hazardous toxic and noxious material, vibration, open storage, glare, outdoor lighting and screening.

Chapter 19, Farmington City Code

The petitioner has requested a variance to allow an earthen pit lined with impervious material to contain non-hazardous circulating fluid during the drilling phase. The petitioner also has requested a variance to use an above-ground steel water tank to store produced water until the well is completed. According to FCC 19-1-5, such pits or tanks may be used prior to completion of the well. However, the pits and tanks must be of impervious material as approved by the state, pumped out, dried, covered and leveled to previous grade within 30 days of completion of the well. The above-ground tanks shall also comply with FCC 19-3-11, Storage tanks, including a maximum height of 12 feet.

A second exit gate for a well site is required according to FCC 19-3-10(a).

Issues

City Engineer

Improvements to Piedras Street require at minimum a base course road 24 feet wide. Paving is recommended. If Piedras Street is paved, a paved apron to the site needs to be installed at minimum 24-feet wide and 50-feet long.

 The utility easement is on a slope above the road and the pipeline would preclude widening of Piedras. Please confirm the location and depth of the pipeline with the City Engineer.

Chief Building Official

 Building permits are required for fencing around the well sites. Building permits need to be obtained before construction begins on any fencing.

Fire Department

- The access road must be 20 feet wide with an all-weather driving surface.
- The site must be fenced upon completion with 6-foot chain link and 2 strands of barbed wire according to FCC 19-3-10.

Police Department

 Safety fencing of an appropriate nature should be required to restrict access to the completed site. Recommend a 6 foot chain-link topped with appropriate deterrent to climbing or circumvention of the fencing.

Planning Department

- This well site location is not within 300 feet of any principal use buildings or within 75 feet of a street.
- Excavation of Piedras Street for the gas and water pipelines must be approved by the City Council and the plans approved by the City Engineer according to FCC 19-2-72.
- The all-weather driving surface required shall extend across the storage yard to the well site (not just to the gate of the storage yard in which the well site is located).
- An address will need to be assigned to the well site.

FINDINGS:

- The applicant is proposing to drill and operate the Federal I Com #102S gas well completed to the Pictured Cliffs and Fruitland Coal formations with a total depth of 1,220 feet.
- 2. The well site is on property owned by M&R Trucking, who has provided letters of support for the petition to the Community Development Department.
- 3. The property is zoned IND, Industrial District. The IND, Industrial District requires a special use permit for oil and gas well drilling, according to Table 2.3 of the UDC.
- 4. According to FCC Section 19-3-4, drilling is restricted to daylight hours for wells of less than 5,000 feet of depth.
- 5. There are no principal use buildings within 300 of the well site.
- The proposed production equipment includes a wellhead and a gas meter in the northwest corner of the well site. Gas and produced water will be piped from the site.

- 7. The pipelines from the well site are proposed to be in the right-of-way of Piedras Street, a public street owned by the City of Farmington. The new pipelines are proposed to be constructed to run from the well site to the Federal I #9 gas well operated by the petitioner. The gas pipeline will have a pressure of 30 p.s.i.g. The produced water pipeline will have a pressure of 70 p.s.i.g. According to FCC 19-2-72, excavation in a City right-of-way for water or gas pipelines shall be allowed only by written permission of the City Council. Construction plans and descriptions must be approved by the city engineer.
- 8. The petitioner is required to enter into a written agreement for use of the City's right-of-way, and this agreement shall include the compensation to be paid by the petitioner to the City.
- Proposed access to the well site is from Piedras Street. The city engineer initially recommended paving of Piedras Street, or a minimum improvement of a 24-foot wide all-weather base course road for the well site access.
- 10. An all-weather base course road 20 feet wide was initially required to provide emergency vehicle access to the well site from Piedras Street across the storage yard to the well site.
- 11. Due to the width the existing roadway on Piedras Street, a base course road 18 feet wide is the largest width that can be built without significant earth work being required. The access road from the gate of the storage yard to the gate of the well site shall be 18 feet wide as well.
- 12. The improvements to Piedras Street shall be constructed from the end of the paved portion of Piedras Street to the gate of the storage yard in which the well site is located.
- 13. The petitioner is requesting the City's permission to use an open reserve pit lined with impervious material during the drilling phase. According to NM State Statute, to drill a well with an open reserve pit (as opposed to using tanks as pits) a driller must receive written permission from the municipality in which the well will be drilled.

PLANNING AND ZONING COMMISSION ACTION of February 25, 2010:

Motion was made by Commissioner Joyce Cardon, seconded by Commissioner Lonrie Moffett to approve Petition SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #1028 gas well located in the IND, Industrial District on Lot 1 of the Maxey Hills Subdivision south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway.

AYE: Chairman Shields and Commissioners Bird, Buchanan, Byrom, Cardon, Ivie, Moffett and Simpson

NAY: None

ABSTAINED: None

ABSENT: Commissioners Kuchera and Williams

THE MOTION PASSED 8-0

OIL AND GAS COMMISSION ACTION of March 9, 2010:

Motion was made by Commissioner Elliott Riggs, seconded by Commissioner John Thompson, to approve Petition No. SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the Federal I Com #102S gas well located in the IND, Industrial district on Lot 1 of the Maxey Hills Subdivision, south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway, including a recommendation to allow water and gas pipelines from the well site to be placed in the City right-of-way of Piedras Street.

AYE: Commissioners Hanson, Riggs and Thompson

NAY: None

ABSTAINED: None

ABSENT: Commissioner Simmons

THE MOTION PASSED 3-0

CITY COUNCIL ACTION OF April 13, 2010:

City Council adopted the Planning and Zoning and the Oil and Gas Commissions' Action Summary and <u>approved</u> Petition SUP 10-02, a request from Dugan Production Corp., represented by Kurt Fagrelius, for a Special Use Permit to allow the drilling and operation of the <u>Federal I Com #102S</u> gas well located in the IND, Industrial district on Lot 1 of the Maxey Hills Subdivision, south of Piedras Street, north of West Main Street, east of Troy King Road and west of the La Plata Highway, subject to conditions a through d as follows:

- a. that the petitioner shall improve the roadway of Piedras Street with an 18-foot wide gravel base course road from the end of pavement of Piedras Street to the well site;
- b. that the City will allow the use of an open reserve pit during drilling which is to be lined with impervious material;
- c. that the City grants permission to place water and gas pipelines from the well site in the City right-of-way of Piedras Street to connect to the petitioner's existing water and gas pipeline system, with plans for the pipeline to be approved by the city engineer; and
- d. that the petitioner shall enter into a written agreement for the use of the City's right-of-way in Piedras Street and that the agreement shall include compensation to be paid by the petitioner to the City.

Approved this 13th day of April 2010.

ATTEST:

Tommy Roberts, Mayor

Dianne Fuhrman, City Clerk

LEGAL DEPARTMENT

APPROVED ASTO FORM

BY.

DATE: H\23