

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD OCT 26 06
OIL CONS. DIV.
DIST. 3

FORM APPROVED
BY BLM 10/10/04
EQUALLY 10/10/04

NM-97837

APPLICATION FOR DEED TO HOLE OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		2006 SEP 22 PM 4:22		7. If Unit or CA Agreement Name and No.	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		RECEIVED FARMINGTON		8. Lease Name and Well No. Arviso #1	
2. Name of Operator DUGAN PRODUCTION CORP.		Contact: KURT FAGRELIUS E-Mail: klagrelius@duganproduction.com		9. API Well No. 30-045-33943	
3a. Address 709 EAST MURRAY DRIVE FARMINGTON, NM 87401		3b. Phone No. (include area code) Ph: 505.325.1821 Fx: 505.327.4613		10. Field and Pool, or Exploratory Potwin Pictured Cliffs	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1475' FSL and 860' FWL, Lat. 36.33985 N At proposed prod. zone Same as above. Long. 107.71096				11. Sec., T., R., M., or Blk. and Survey or Area L Sec. 5, T24N, R8W NMPM	
5. Distance in miles and direction from nearest town or post office* Approx. 30-miles SE of Bloomfield, New Mexico				12. County or Parish San Juan Co.	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 860 Feet		16. No. of Acres in Lease 160.0 Acres		13. State NM	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. Not Applicable		19. Proposed Depth 2080 Feet		17. Spacing Unit dedicated to this well SW/4-160.0 Acres	
21. Elevations (Show whether DF, KB, RT, GL, etc.) GL-6753'		20. BLM/BIA Bond No. on file On File NMD140		23. Estimated duration 7-Days	
22. Approximate date work will start ASAP		24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Kurt Fagrelus</i>	Name (Printed/Typed) KURT FAGRELIUS	Date 9/22/06
Title GEOLOGIST		
Approved by (Signature) <i>Jim Lovato</i>	Name (Printed/Typed)	Date 10/25/06
Title <i>Asst. AFM Manager</i>	Office	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Pictured Cliffs Sandstone will be completed from approximately 1945' - 1955'. The interval will be fracture stimulated.

✓

District II
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33943		*Pool Code 83000	*Pool Name POTWIN PICTURED CLIFFS	
*Property Code 36101	*Property Name ARVISO			*Well Number 1
*OGRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION			*Elevation 6753'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	5	24N	8W		1475	SOUTH	860	WEST	SAN JUAN

¹¹Bottom Hole Location If Different From Surface

U. or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160.0 Acres - (SW/4)			

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

1379.40'

LOT 4

LOT 3

LOT 2

LOT 1

5216.64'

1426.26'

1305.80'

1304.82'

1306.80'

5

DUGAN
NM-97837

860'

LAT: 36.33985°N
LONG: 107.71096°W
DATUM: NAD83

1475'

1306.80'

5169.78'

2609.64'

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Kurt Fagrelis
Signature

Kurt Fagrelis

Printed Name

Geology

Title

September 20, 2006


Date

¹⁸ SURVEYOR CERTIFICATION

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

Date of Survey: MAY 31, 2006

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.	30-045-33943
5. Indicate Type of Lease	Federal XX STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	Federal NM-97837
7. Lease Name or Unit Agreement Name	Arviso
8. Well Number	#1
9. OGRID Number	006515
10. Pool name or Wildcat	Potwin Pictured Cliffs

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
GL-6753'

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drilling Depth to Groundwater +100' Distance from nearest fresh water well +1000' Distance from nearest surface water +200'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material Synthetic

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Reserve pit for drilling (lined) ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Pictured Cliffs Sandstone will be completed from approximately 1945' - 1955'. The interval will be fracture stimulated.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kurt Fagrelius TITLE Geology DATE 9/22/2006

Type or print name Kurt Fagrelius

E-mail address: kfagrelius@duganproduction.com

Telephone No. _____

For State Use Only

APPROVED BY: [Signature]

DEPUTY OIL & GAS INSPECTOR, DIST. [Signature]

DATE OCT 26 2006

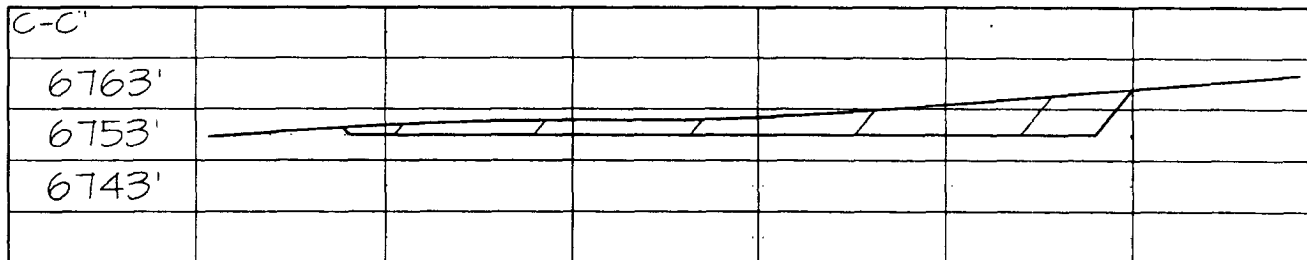
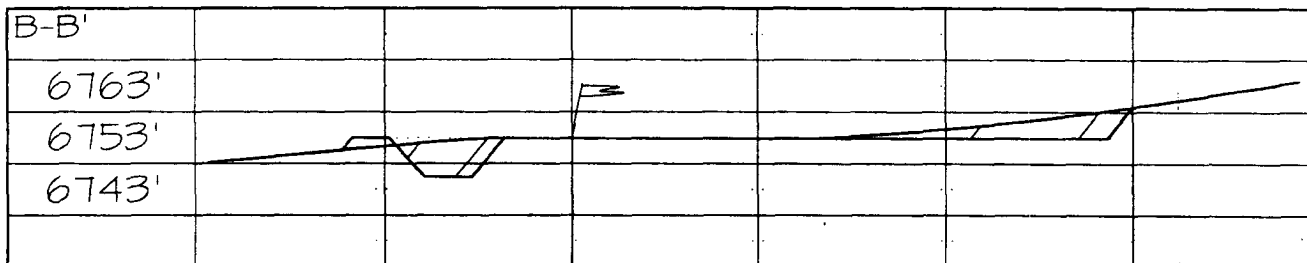
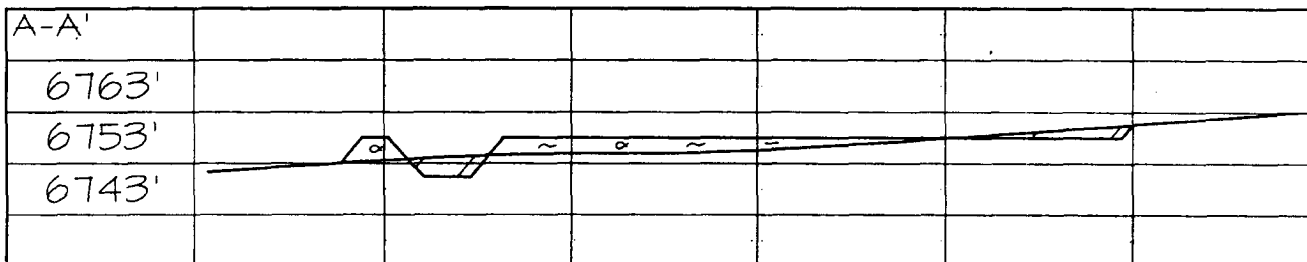
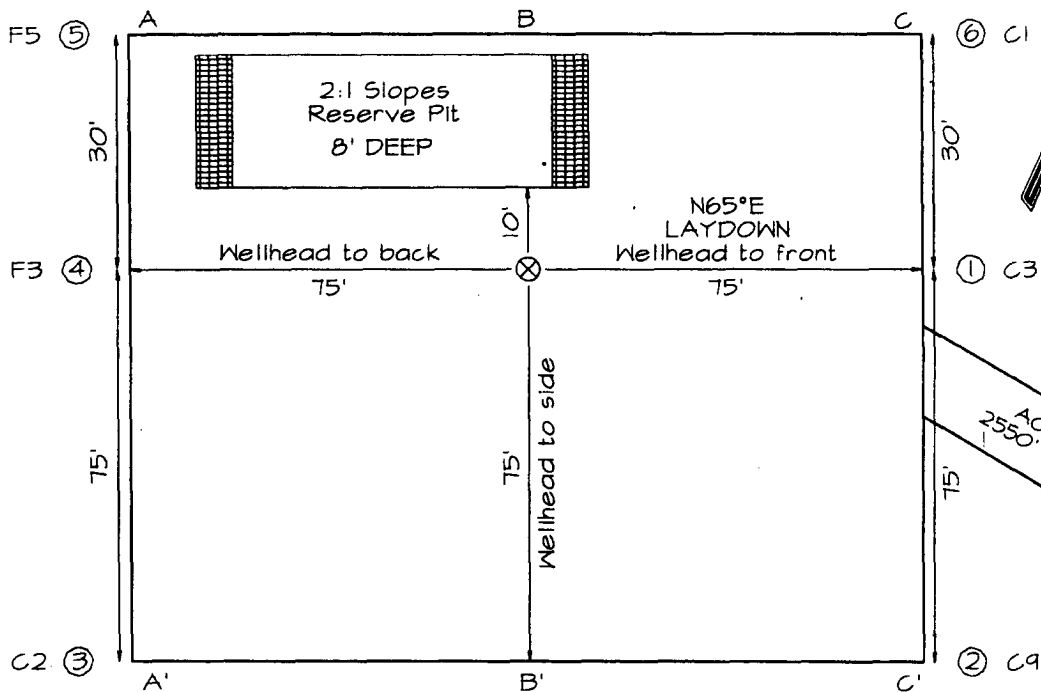
Conditions of Approval (if any): _____

DUGAN PRODUCTION CORPORATION ARVISO #1
1475' FSL & 860' FWL, SECTION 5, T24N, R8W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6753'

LATITUDE: 36.33985° N
LONGITUDE: 107.71096° W
 DATUM: NAD1983

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

EXHIBIT B
OPERATIONS PLAN
Arviso #1

APPROXIMATE FORMATION TOPS:

Ojo Alamo	1175'	Pictured Cliffs	1943'
Kirtland	1245'		
Fruitland	1610'	Total Depth	2080'

Catch samples every 10 feet from 1850 feet to total depth.

LOGGING PROGRAM:

Run cased hole GR-CCL-CNL from total depth to surface.

CASING PROGRAM:

<u>Hole</u> <u>Size</u>	<u>Casing</u> <u>Size</u>	<u>Wt./ft.</u>	<u>Setting</u> <u>Depth</u>	<u>Grade and</u> <u>Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	2080'	J-55

Plan to drill a 12-1/4" hole and set 120' of 8-5/8" OD, 24#, J-55 surface casing. Then plan to drill a 7" hole to total depth with gel-water mud program to test the Fruitland Coal. 5-1/2", 14#, J-55 production casing will be run and cemented. Cased hole GR-CCL-CNL log will be run. Productive zone will be perforated and fractured. After frac, the well will be cleaned out and production equipment will be installed.

CEMENTING PROGRAM:

Surface: Cement to surface with 70 cf Class B + 2% CaCl₂.
Circulate to surface.

Production Stage-Cement with 220 cf 2% Lodense with
1/4# celloflake/sx followed by 100 cf Class "B" with
1/4# celloflake/sx.
Total cement slurry for production stage is 320 cf.
Circulate cement to surface.

An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement. An adequate number of casing centralizers will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizers will be determined based on API standards. Centralizers to impart a swirling action around

the casing will be used just below and into the base of the lowest usable water zone. These devices will assist mud displacement, increase cement bonding potential and create an effective hydraulic seal. A chronological log will be kept which records the pump rate, pump pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

WELLHEAD EQUIPMENT:

Huber 8-5/8"x5-1/2" casing head, 1000# WP, tested to 2000#.
Huber 5-1/2"x2-7/8" tubing head, 1000# WP, tested to 2000#.

BOP and Related Equipment will include for a 2000 psi system:
(Exhibit D)

Annular preventer, double ram, or 2 rams with one being blind and one being a pipe ram.

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

Safety valve and subs to fit all drill string connections in use.

Pressure gauge on choke manifold.

2" minimum choke line.

Fill-up line.

Contacts:

Dugan Prod.Corp. Office & Radio Dispatch: 325-1821

Mark Brown	327-3632 (H)
	320-8247 (M)

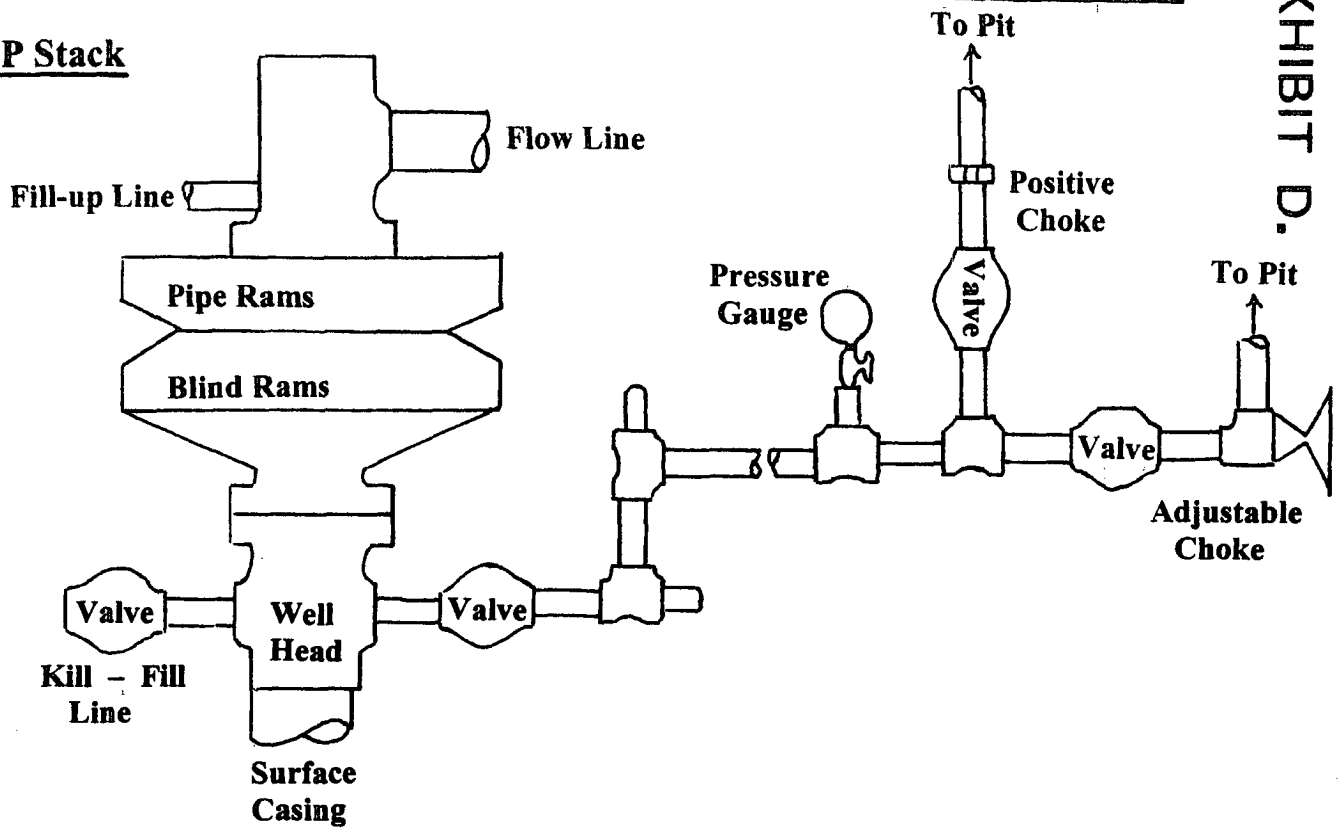
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

John Alexander	325-6927 (H)
	320-1935 (M)

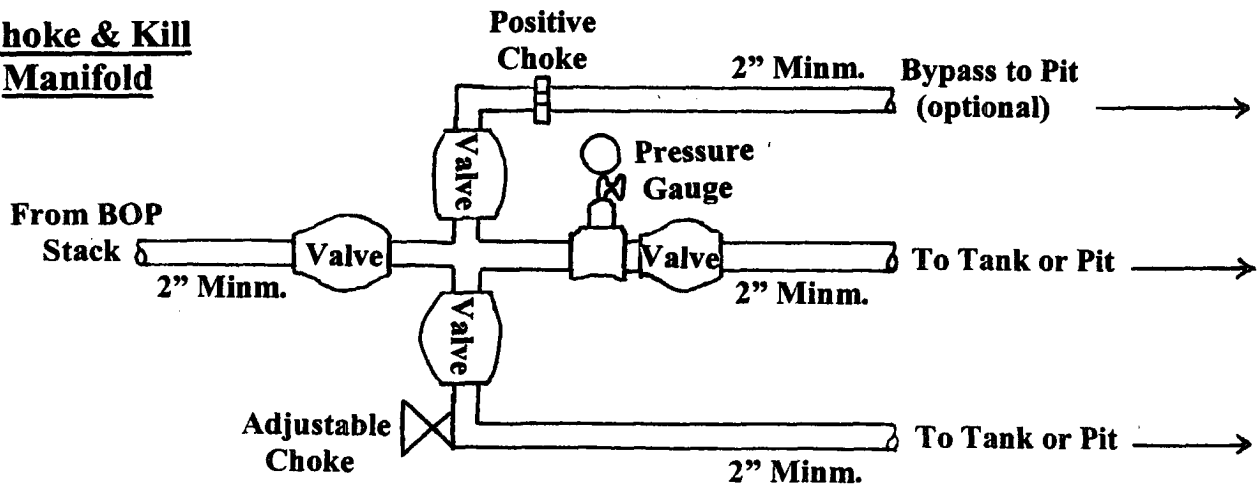
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



Working Pressure for all equipment is 2,000 psi or greater

DUGAN PRODUCTION CORP.
ARVISO #1