

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

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

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		WELL API NO. 300-045-35745 5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> 6. State Oil & Gas Lease No. V-8294-1
2. Name of Operator Dugan Production Corp.		7. Lease Name or Unit Agreement Name Sunflower Unit
3. Address of Operator PO Box 420, Farmington, NM 87499-0420		8. Well Number 1
4. Well Location Unit Letter <u>P</u> : <u>1166</u> feet from the <u>South</u> line and <u>692</u> feet from the <u>East</u> line Section <u>2</u> Township <u>24N</u> Range <u>13W</u> NMPM San Juan County		9. OGRID Number 006515
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6296' GR		10. Pool name or Wildcat Basin Fruitland Coal

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

NOTICE OF INTENTION TO:

- PERFORM REMEDIAL WORK
- TEMPORARILY ABANDON
- PULL OR ALTER CASING
- DOWNHOLE COMMINGLE
- CLOSED-LOOP SYSTEM
- OTHER: Change Location
- PLUG AND ABANDON
- CHANGE PLANS
- MULTIPLE COMPL

SUBSEQUENT REPORT OF:

- REMEDIAL WORK
- COMMENCE DRILLING OPNS.
- CASING/CEMENT JOB
- OTHER:
- ALTERING CASING
- P AND A

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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Well is located on Tribal Trust surface and location had to be moved 500' to the north. New C-102 is attached. New location is as follows:

Unit Letter I, Section 2, T24N, R13W - 1654' FSL & 850' FEL - Lat. 36.341432°N, Long. 108.188339°W (NAD1983)

*APD cancellation*

OIL CONS. DIV DIST. 3

APR 25 2016

*New APD needed for surface hole change New API will also be issued.*

Spud Date:

Rig Release Date:

*This Sundry OK to cancel this API & APD.*

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

SIGNATURE Kurt Fagrelius TITLE Vice-President, Land & Exploration DATE 4/22/16

Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com PHONE: 505-325-1821

For State Use Only

APPROVED BY: [Signature]  
 Conditions of Approval (if any):

DEPUTY OIL & GAS INSPECTOR  
 TITLE AV DISTRICT #3 DATE 4/26/16

District I  
1625 N. French Drive, Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

District II  
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1000 Rio Brazos Road, Aztec, NM 87410  
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District IV  
1220 S. St. Francis Drive, Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to  
Appropriate District Office

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-35745		<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name BASIN FRUITLAND COAL
<sup>4</sup> Property Code 315782	<sup>5</sup> Property Name SUNFLOWER UNIT		<sup>6</sup> Well Number 1
<sup>7</sup> GRID No. 006515	<sup>8</sup> Operator Name DUGAN PRODUCTION CORPORATION		<sup>9</sup> Elevation 6297'

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	2	24N	13W		1654	SOUTH	850	EAST	SAN JUAN

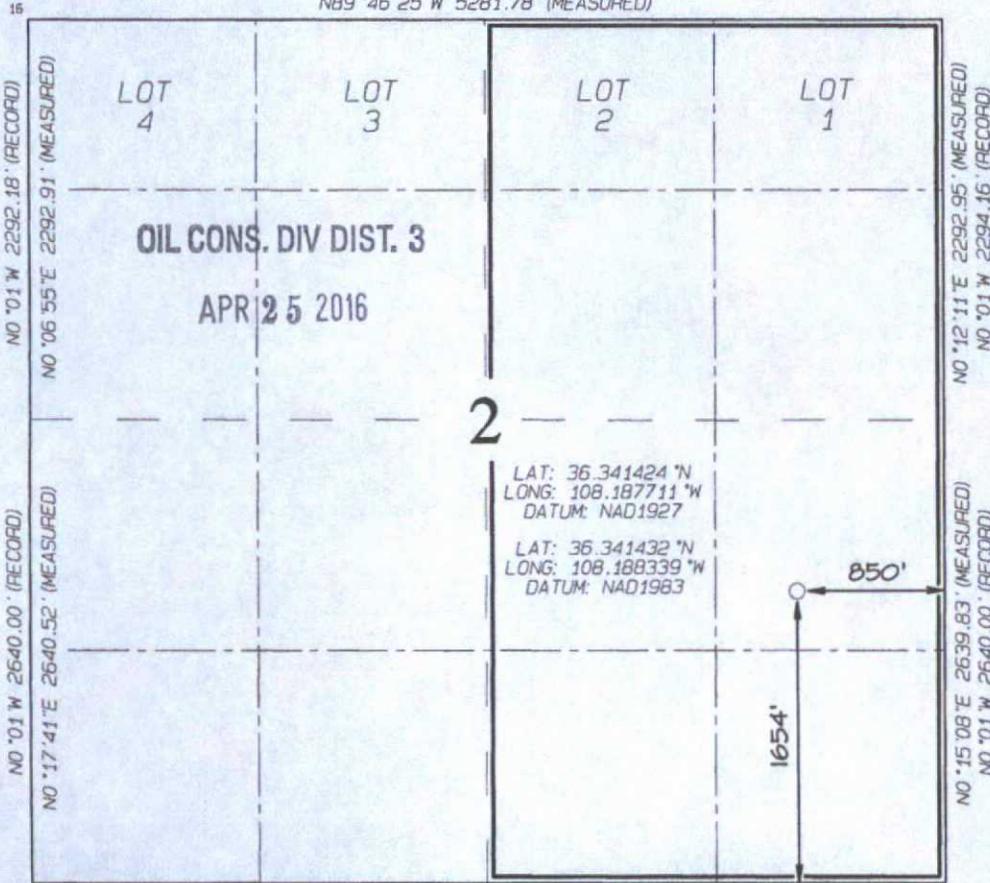
<sup>11</sup>Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 299.01 Acres - (E/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

WEST 5280.00' (RECORD)  
NB9°46'25"W 5281.78' (MEASURED)



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the Division.

*Kurt Fagrellius* 4/22/2016  
Signature Date  
Kurt Fagrellius  
Printed Name  
kfagrellius@duganproduction.com  
E-mail Address

<sup>18</sup> 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 Revised: APRIL 22, 2016  
Date of Survey: APRIL 9, 2016

Signature and Seal of Professional Surveyor



JASON C. EDWARDS  
Certificate Number 15269

## EXHIBIT A.

### Surface Use Plan

Sunflower Unit #1  
Lease #NM-V-8294-1  
NESE of Section 2, T24N, R13W  
1654' FSL and 850' FEL  
San Juan County, New Mexico

1. Existing Roads – are shown on **Exhibits 1a, 1b, 1c and 3.**
  - A. Driving directions are shown on **Exhibit 2.**
  - B. The existing road is in fair condition and will be upgraded by crowning, ditching and constructing culverts (according to “Gold Book Standards” and the BLM Handbooks 9113-1 and 9113-2) from the well site back to County Road 7250 as shown on **Exhibit 1c.**
  - C. Inspections and maintenance will be conducted as shown in the attached Road Maintenance Plan (**Appendix B**).
2. New and or Reconstructed Access Roads – are shown on **Exhibit 1d.**
  - A. 1,717.20-feet of access road is required.
  - B. All new or reconstructed access roads will be constructed according to “Gold Book Standards” and the BLM Handbooks 9113-1 and 9113-2.
  - C. The proposed access road to the well pad was defined as a Resource Road during the onsite inspections conducted on January 21, 2016.
  - D. The maximum road width will be 30-feet overall with a 14-foot wide driving surface.
  - E. During the drilling, completion and subsequent production operations vehicle traffic will be confined to the 14-foot wide driving surface.
  - F. Depending on future drainage and surface run-off issues, culverts may need to be located and installed as needed along the new access road.
  - G. No temporary use areas will be needed.
  - H. Maximum grade of access road is 6 %.
  - I. Construction materials and methods – refer to **6.A below.**
  - J. Dugan Production will be responsible for road maintenance and up-keep during construction, completion and production activities until the subject well is plugged and abandoned. See Attached Road Maintenance Plan (**Appendix B**).
  - K. As necessary, airborne dust from the access road and well pad will be suppressed using water and/or magnesium chloride during periods of excessive dust or at the request of the Acting Officer of the BLM.
3. Location of Existing Wells – See **Exhibit 3.**

4. Location of Existing and/or Proposed Facilities -

- A. Dugan will protect all survey monuments, witness corners, reference monuments and bearing trees in the subject area against disturbance during construction, completion, production, maintenance and reclamation activities.

If any corners, markers or monuments are disturbed or proposed to be, Dugan will notify the Authorized Officer of the BLM. If any corners, markers or monuments are disturbed, Dugan will employ a Registered Land Surveyor to restore the disturbed corner, marker or monument to its original location using best industry standards.

B. Pipeline - is shown on **Exhibit 4a and 4b**.

1. Pipeline right-of-way will be 3,386.9-feet in total length and 30-feet in width all of which is located on Navajo Tribal Trust surface.
2. 4" gas and 2" water pipelines will be constructed with poly-pipe. The poly-pipe will be rated at 160-psi, tested to 150-psi and the maximum operating pressure will be 35-psi. Both pipelines will be buried in the same trench and will parallel existing and proposed roads. Pipelines will off-set centerline of access road by 15-feet to the west. Pipeline will be centerline flagged at the time of location staking.
3. A 30-foot wide right-of-way is requested. The pipeline and access road will be located and constructed within the total right-of-way width of 30-feet.
4. Pipelines will be buried at a depth of 6-feet below the surface and at road crossings, will be buried to a depth of at least 6-feet.
5. Following completion of the pipelines, vehicle traffic will be restricted from traveling on re-claimed areas.

C. Production Facility

1. Prior to setting any equipment, the layout of facilities and location of production equipment will be determined following the facility and reclamation onsite with the Acting Officer of the BLM.
2. There will be no tanks or vessels that contain any type of liquid on location. The only equipment on location will be a pumping unit and a meter run.
3. As determined during the onsite inspections on January 21, 2016: **All permanent, above ground equipment will be painted Carlsbad Canyon Brown** within 3-months of installation. Facilities that are required to comply with Occupation Health and Safety Act Rules and Regulations are exempt from this painting requirement.

5. Location and Types of Water Supply -

- A. Water for use during drilling and completion operations will be hauled by trucks over the roads described above in #1 and #2. The water source will be an existing, private water well located in the SWNE of Section 32, T25N, R9W. The New Mexico Office of the State Engineer has assigned the POD Number SJ-2105 to the well better known as the "Blanco Trading Post Water Well". The water well is located approximately 35-miles southeast of Bloomfield, New Mexico on US highway 550.

6. Construction Materials and Methods -

A. Access Road – is 1,717.2-feet in length and is shown on **Exhibit 1c, 1d and 3.**

1. Access road will be designed and constructed (as a Resource Road) according to the BLM Gold Book Standards and BLM 9113-1 (Roads Design Handbook) and BLM 9113-2 (Roads National Inventory and Condition Assessment Guidance and instruction Handbook). Construction will include ditching, draining, installation of culverts, crowning and capping or sloping and dipping the roadbed, as necessary, to provide a well-constructed, properly drained and safe road.

There will be no construction activity when soils are water saturated or frozen.

Access road will be constructed using the existing native soils to meet its intended use. The intended use of the proposed road will be to provide vehicle access during the construction, drilling, completion and production phases of the well. During the production phase, only light truck traffic (2-3 times per week) will use the proposed road in order to monitor the well and occasionally (approximately 1-time per year) a small pulling unit may use the proposed road to service the well. Following the completion of a commercial well, there will be a meeting with BLM and Dugan personnel to review any possible upgrades necessary to the existing roads in order to prevent soil erosion and improve access.

2. No fences will be cut during construction of the pipeline and road and there will be no new cattle guards or fenced gates with bracing when construction is complete.
3. Prior to ground disturbance, brush and grasses will be brush-hogged to ground level.
4. Following removal of all vegetation, all topsoil (uppermost 6" of soil) will be removed and stockpiled. The top soil may contain small pieces of brush-hogged material (grasses, brush and sage). The top soil will be segregated to prevent mixing with any sub-surface soil and stored where it can be used later during reclamation activity along the access road and pipeline.
5. Construction materials for access road will be obtained on-site. If additional material is needed, it will be obtained from existing private or approved sources (providing it does not contain any noxious weeds) and will be transported to the construction site with trucks over existing roads in the area.
6. The proposed access road will be crowned and ditched or sloped and dipped, with water turnouts as necessary to improve drainage and prevent excessive soil erosion.
7. Construction equipment could include a chain saw, brush hog, maintainer, excavator and a dozer.
8. Construction of the access road and well pad could take approximately 1-week.

B. Well Pad – is shown on **Exhibit 5.**

There will be no construction activity when soils are water saturated or frozen.

1. Prior to ground disturbance, brush, grasses and sage will be brush-hogged to ground level.
2. Following removal of all vegetation, all topsoil (uppermost 6" of soil) will be removed and stockpiled in the construction zone (See Exhibit 6). Top soil will not be used for

any construction related activity. The top soil will be segregated to prevent mixing with sub-surface soils. Stock piles will be shallow enough to prevent sterilization of the soil. Topsoil may contain small pieces of brush-hogged material (grasses, brush and sage). Compaction of the top soil will be minimized by keeping vehicle and equipment traffic from crossing over the stock piles. Sediment, erosion control devices (wattles or fences) or "best management practices" will be used to prevent wind and water erosion of the topsoil until it has been redistributed during reclamation.

3. Construction materials for well pad will be obtained on-site. If additional material is needed, it will be obtained from existing private or approved permitted sources (providing it does not contain any noxious weeds) and will be transported to the construction site with trucks over existing roads in the area.

The maximum cut will be 1-foot on the east (corners #3 and 5) and there will be a 1-foot fill on the southeast (corner #5). **See Exhibit 5.**

4. As determined during the onsite inspection on January 21, 2016: a drain to collect and divert surface runoff will be constructed on the west side of the pad draining to the east along the south and north sides of the pad (**Exhibit 5**).
5. Construction equipment could include a brush hog, maintainer, excavator and a dozer.

C. Pipeline – is described in **4.B. above and shown on Exhibits 3, 4a and 4b.**

There will be no construction activity when soils are water saturated or frozen.

1. Prior to ground disturbance, brush, grasses and sage will be brush-hogged to ground level.
2. Following removal of all vegetation, all topsoil (uppermost 6" of soil) will be removed and stockpiled. The top soil may contain small pieces of brush-hogged material (grasses, brush and sage). The top soil will be segregated to prevent mixing with the sub-surface soil. The top soil will be stacked on the working side and at the greatest distance from the pipe ditch. The sub-surface soil will be stacked on the inside of the topsoil on the working side and closest to the ditch. Once construction of the pipeline is complete, the subsurface soil will be mopped back into the ditch over the pipe. After all of the subsurface soil has been placed over the pipe, the top soil will then be brought in over the top and spread as layer uniform in thickness over the top of the subsurface soil. All necessary precautions to prevent mixing of the top soil and subsurface soil will be taken. (**See Appendix A**).
3. Construction materials for pipeline will be obtained on-site. If additional material is needed, it will be obtained from existing private or approved permitted sources (providing it does not contain any noxious weeds) and will be transported to the construction site with trucks over existing roads in the area.

7. Methods for Handling Wastes –

A. Closed loop drilling system will be used to contain all liquids and solids waste associated with drilling operations is shown in **Exhibit 6**.

1. System will be designed and maintained to prevent contamination of fresh water and protect wildlife, public health and the environment.

2. Stockpile top-soil prior to leveling well pad and digging pit. The top-soil will be kept separate from sub-soil and used as a final cover for interim reclamation of the pit and well pad.
  3. A pit approximately 45-feet long by 12-feet wide and 3-feet deep with vertical sidewalls will be constructed. The pit will be constructed with a firm foundation and interior slopes, smooth and free of rocks or sharp edges.
  4. An open-top steel tank approximately 40-feet long by 10-feet wide and 4-feet deep with internal baffles will be set in the pit and used to separate solids from the drilling fluids.
  5. An upright, 400-bbl tank will be set adjacent to the open top steel tank and used for circulation and storage of drilling fluids.
  6. An upright, 400-bbl tank will be set adjacent to the circulation/storage tank and used for storage of fresh water.
  7. Diversionary berms, ditches or sloping will be constructed to prevent surface run-off from flowing into pit.
  8. Sub-surface soil will be used to construct a 1-foot tall berm around the perimeter of the pit to prevent surface run-off water from entering the pit.
- B. Solids – all accumulated solids (cuttings) in the open-top steel tank and circulating tank will be removed by a vacuum truck and hauled daily to the Industrial Ecosystem Inc. (IEI) land farm for disposal.
- C. Liquids – all liquids (drilling fluids) from the closed loop system will be transferred to the next well in the drilling program for re-use or hauled to Basin Disposal for disposal. All flow back water recovered during completion operations will be collected in a steel storage tank and disposed of at either Basin Disposal or IEI waste disposal facilities.
- D. Spills – any spills of non-freshwater liquid will be reported to the Farmington Field Office of the BLM and the New Mexico Oil Conservation District office within 48-hours. The spill will be cleaned up immediately and transferred to either Basin Disposal or the IEI waste disposal facilities.
- E. Sewage – portable, toilets will be used to collect and contain human sewage. Toilets will be onsite during drilling and completion activity. The toilet holding tanks will be pumped as needed and the contents will be disposed at an approved sewage disposal facility.
- F. Trash – portable dumpsters will be used to collect and contain garbage and other waste material and will be onsite during drilling and completion activity. The contents of the dumpsters will be removed as needed and disposed of at an approved waste disposal facility.
- G. After the drilling and completion rigs and the portable toilet and dumpsters are removed from the location, Dugan will be responsible for any clean-up of location necessary. Also, the area will be maintained free of trash and debris for the life of the well.

- H. During the drilling, completion and production of the well, there will not be any chemicals subject to reporting under SARA Title III greater than 10,000 pounds in weight, used, produced, stored, transported or disposed of annually at the well site.
- I. During the drilling, completion and production of the well, there will not be any extremely hazardous substances as defined in 40 CFR 355 used, produced, stored, transported or disposed of at the well site.

8. Ancillary Facilities – None Planned.

9. Well Site Layout -

- A. Proposed well site layout and cross sections showing the proposed cuts and fills on the location are shown in Exhibit 5. Construction material to be used is described in 6.B.3.
- B. The production facility layout will be determined following the Facility and Reclamation onsite with the BLM Representative and prior to installation of any surface equipment.

10. Plans for Reclamation and Abandonment -

- A. During the onsite inspection on January 21, 2016 it was determined the project area is characterized by the "Sagebrush Vegetation Community ". See the Surface Reclamation Plan (**Appendix A**).
- B. The well pad, road and pipeline will fall under the BLM Vegetation Reclamation Procedure B. The site specific Reclamation Plan is in **Appendix A**. The BLM will be contacted 48-hours prior to any construction and reclamation activity.

11. Surface Ownership –

Navajo Nation  
Navajo Land Department  
P.O. Box 2249  
Window Rock, Arizona 86515  
(928) 871-6490

12. Other Information –

- A. Well pad, access road and pipeline right-of-way are on Navajo Tribal Trust surface. APD will be reviewed and approved by the BIA, BLM and Navajo Nation prior to any construction activity.
- B. A Class III Cultural Resource Inventory of the proposed well pad, access road and pipeline is being prepared and will be submitted to the Farmington Field Office of the BLM and the Navajo Nation Cultural Resources Department.
- C. At least 48-hours prior to any dirt moving operations, construction contractors will contact the New Mexico One Call system to identify and locate any pipelines or electric lines located near the proposed well pad, access road or pipeline.
- D. All activities associated with this application will be performed in full compliance with the approved Application for Permit to Drill (which includes the Archeology Stipulations and Conditions of Approval), applicable lease terms and existing laws and regulations.

- E. Dugan Production Corp. is responsible for the actions of its subcontractors. A copy of the approved Application for Permit to Drill (which includes the Archeology Stipulations and Conditions of Approval) will be provided to the contractors and be kept on site during all construction, drilling and interim reclamation activities.
- F. Other surface use activities and surface ownership of all involved lands:  
Navajo Tribal Trust surface, grazing.

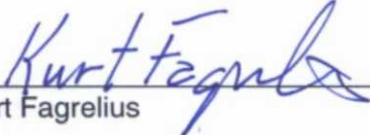
13. Lessee's or Operator's Representative -

Kurt Fagrelius  
Dugan Production Corp.  
P.O. Box 420  
Farmington, New Mexico 87499  
kfagrelius@duganproduction.com  
505-325-1821 office  
505-320-8248 cell

14. Certification -

The Following statement must be signed by the Lessee's or Operator's Field Representative who is identified above in Item #13 of this Surface Use Plan.

I hereby certify that I, or persons under my direct supervision, has inspected the proposed drill site, access route and pipeline route; that I am familiar with the conditions which presently exist; that the statements made in this Surface Use Plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by the Operator and its Contractors and Subcontractors in conformity with this Application Surface Use Plan and the terms and conditions under which it is approved. I also certify that I, or the company I represent, are responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

By:   
Kurt Fagrelius

Date: April 22, 2017

EXHIBIT B.

Operations Plan

Sunflower Unit #1  
Lease #NM-V-8294-1  
NESE of Section 2, T24N, R13W  
1654' FSL and 850' FEL  
San Juan County, New Mexico

1. **APPROXIMATE FORMATION TOPS:**

Kirtland	Surface
Fruitland	505'
Pictured Cliffs	915'
<b>Total Depth</b>	<b>1065'</b>

Catch samples every 10 feet from 650-feet to total depth.

2. **LOGGING PROGRAM:**

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

3. **CASING PROGRAM:**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./ft.</u>	<u>Setting Depth</u>	<u>Grade and Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7-7/8"	5-1/2"	15.5#	1065'	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 7-7/8" hole to total depth with gel-water mud program to test the Fruitland Coal. 5-1/2", 15.5#, 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.

4. **CEMENTING PROGRAM:**

Surface: Cement to surface with 75 sks (98.25 Cu.ft) Type III cement w/ 2 % bwoc CaCl<sub>2</sub> + 0.25 lbs/sk Celloflake + 53.6% Fresh Water (15.00 lbs/gal, 1.31 Cu.ft/sk). Circulate cement to surface.

Production: Cement w/ 95 sks Premium Lite FM + 8% bwoc Bentonite + 3% bwoc Calcium Chloride + 0.25 lbs/sk Cello Flake + 5 lbs/sack LCM-1 + 0.4% bwoc Sodium Metasilicate + 0.4 % bwoc FL-52A + 112.3% Fresh Water ( 12.1 lbs/gal, 2.13 cu.ft/ft - 202 cu.ft slurry). Tail w/ 92 sks Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sk Cello flake + 0.2% bwoc FL-52A + 59% Freshwater (14.6 lbs/gal, 1.38 cu.ft/ft - 127 cu.ft). Total slurry for the job-329 Cu.ft. 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 useable 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, pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

5. **Maximum Anticipated Bottom Hole Pressure** - 300 psi.
6. **Drilling Fluid** - will be fresh water with bentonite 8.9#/gal.
7. **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#.
8. **Blow-Out Preventer Equipment (BOPE): Exhibit 7.**
  - 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 adjustable 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.

Working pressure for all BOPE will be 2,000 psi or greater. Will test BOPE (blind rams, pipe rams, choke manifold and surface casing) separately. Each test will include a low pressure test to 250-psig held for five minutes and a high pressure test to 800-psig held for thirty minutes (with no more than a 10-percent pressure drop during the duration of the tests). If a 10-percent or greater pressure drop occurs; a packer will be run to isolate the surface casing and BOPE to locate the source

of the leak.

9. **Contacts:** Dugan Prod. Corp. Office & Radio Dispatch:

(505) 325-1821

Gerald Wright

Kurt Fagrelius

John Alexander

(505) 632-5150 (H)

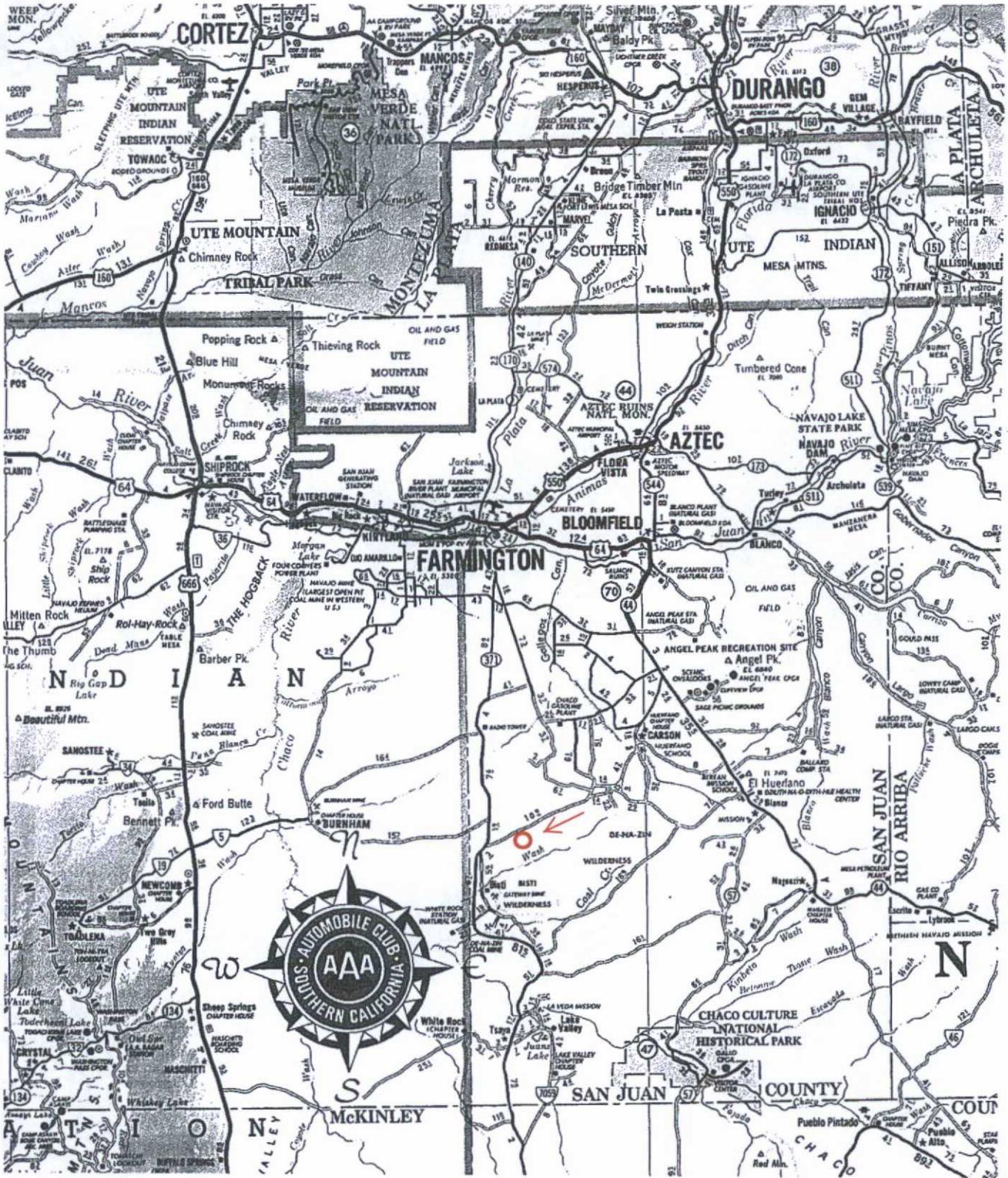
(505) 325-4327 (H)

(505) 325-6927 (H)

(505) 330-9585 (M)

(505) 320-8248 (M)

(505) 320-1935 (M)



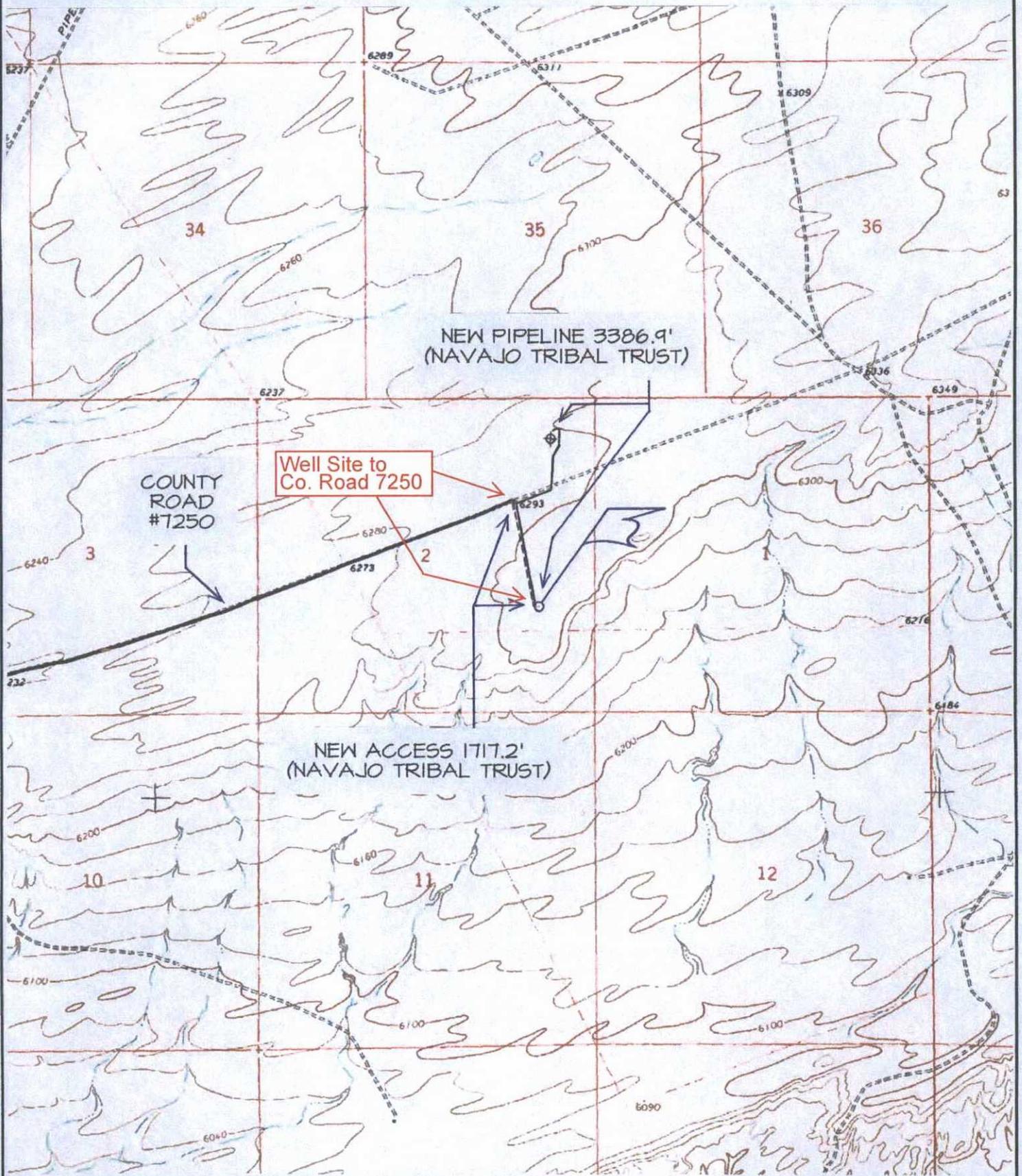
DUGAN PRODUCTION CORP.  
Sunflower Unit #1



# DUGAN PRODUCTION CORPORATION SUNFLOWER UNIT #1

1654' FNL & 850' FEL, SECTION 2, T24N, R13W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

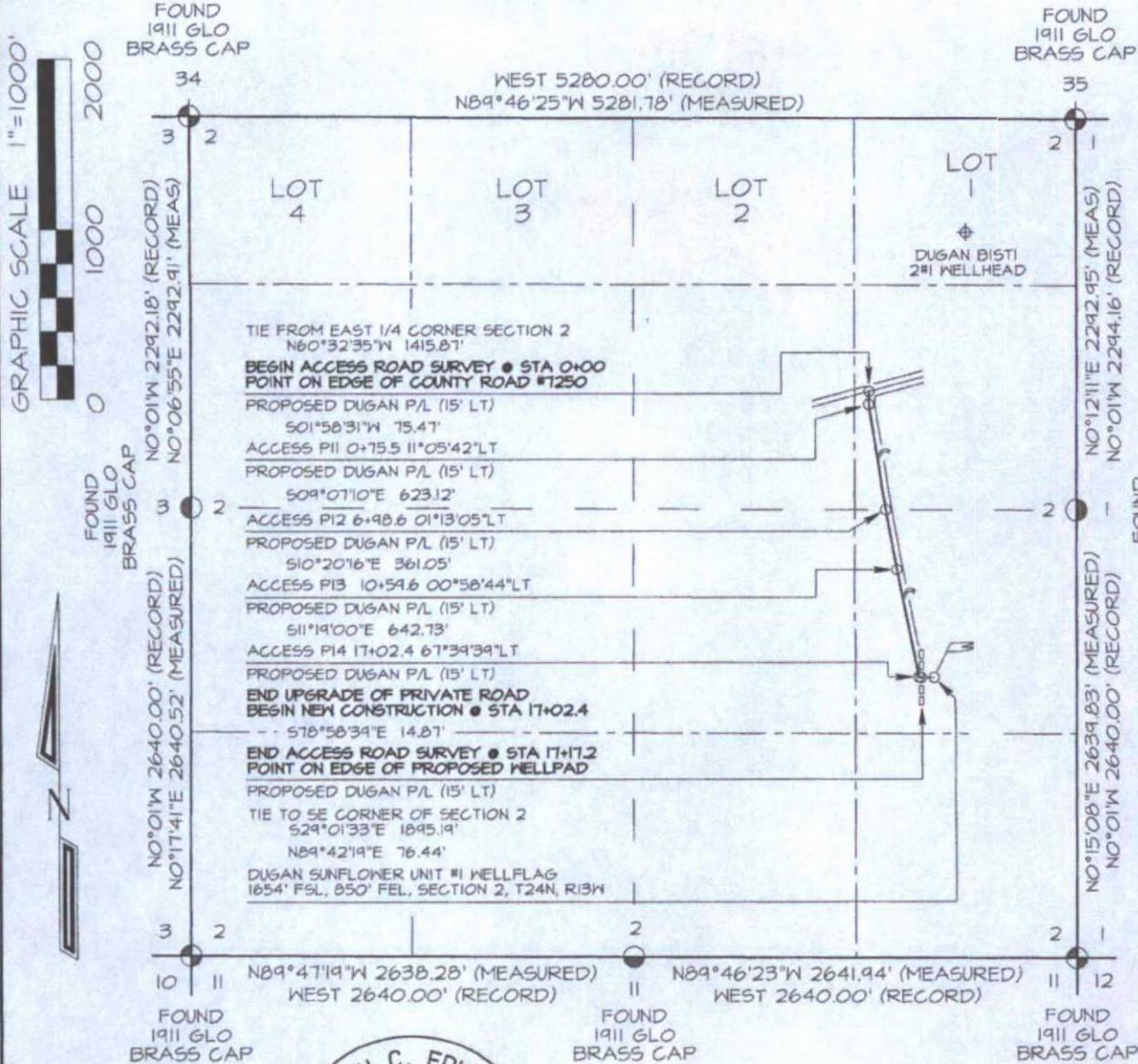
Exhibit 1c.



TOPO NAMES : ALAMO MESA WEST  
& BISTI TRADING POST

⊕ PRODUCING WELL   ⊗ PLUGGED & ABANDONED WELL

# DUGAN PRODUCTION CORPORATION SUNFLOWER UNIT #1 PROPOSED ACCESS ROAD SURVEY LOCATED IN THE SE/4 NE/4 & NE/4 SE/4 OF SECTION 2, T24N, R13W, NMPM SAN JUAN COUNTY, NEW MEXICO



**PLAT NOTE:**  
BEFORE ANY CONSTRUCTION BEGINS, CONTRACTOR IS ADVISED TO CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED PIPELINES OR CABLES IN THE AREA OF THE PROJECT

**BASIS OF BEARING:**  
REAL-TIME KINEMATIC GPS SURVEY SOLUTION OBTAINED FROM SATELLITES TRACKED ON APRIL 9, 2016 FROM A REFERENCE STATION POSITIONED IN NE/4 SW/4 OF SECTION 2, T24N, R13W



~ SURFACE OWNERSHIP ~  
Navajo Tribal Trust Land

0+00 TO 17+17.2	1717.2 FT / 104.1 RODS
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I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

**JASON C. EDWARDS** Date: April 22, 2016  
Jason C. Edwards, P.L.S.  
New Mexico L.S. #15269

Prepared for: DUGAN PRODUCTION P.O. BOX #420 FARMINGTON, NM 87499		<b>Land Surveyor:</b> Jason C. Edwards <b>Mailing Address:</b> Post Office Box 6612 Farmington, NM 87499 <b>Business Address:</b> 111 East Pinon Street Farmington, NM 87402 (505) 486-1695 (Office) ncesurveys@qwestoffice.net
<b>SURVEYS, INC.</b>		SHEET 3 OF 8 FILENAME: 24032PA2 CHECKED BY: JCE DRAWN BY: JPM

Directions from the Intersection of US Hwy 64 & State Hwy 371

in Farmington, NM to Dugan Production Corporation Sunflower Unit #1

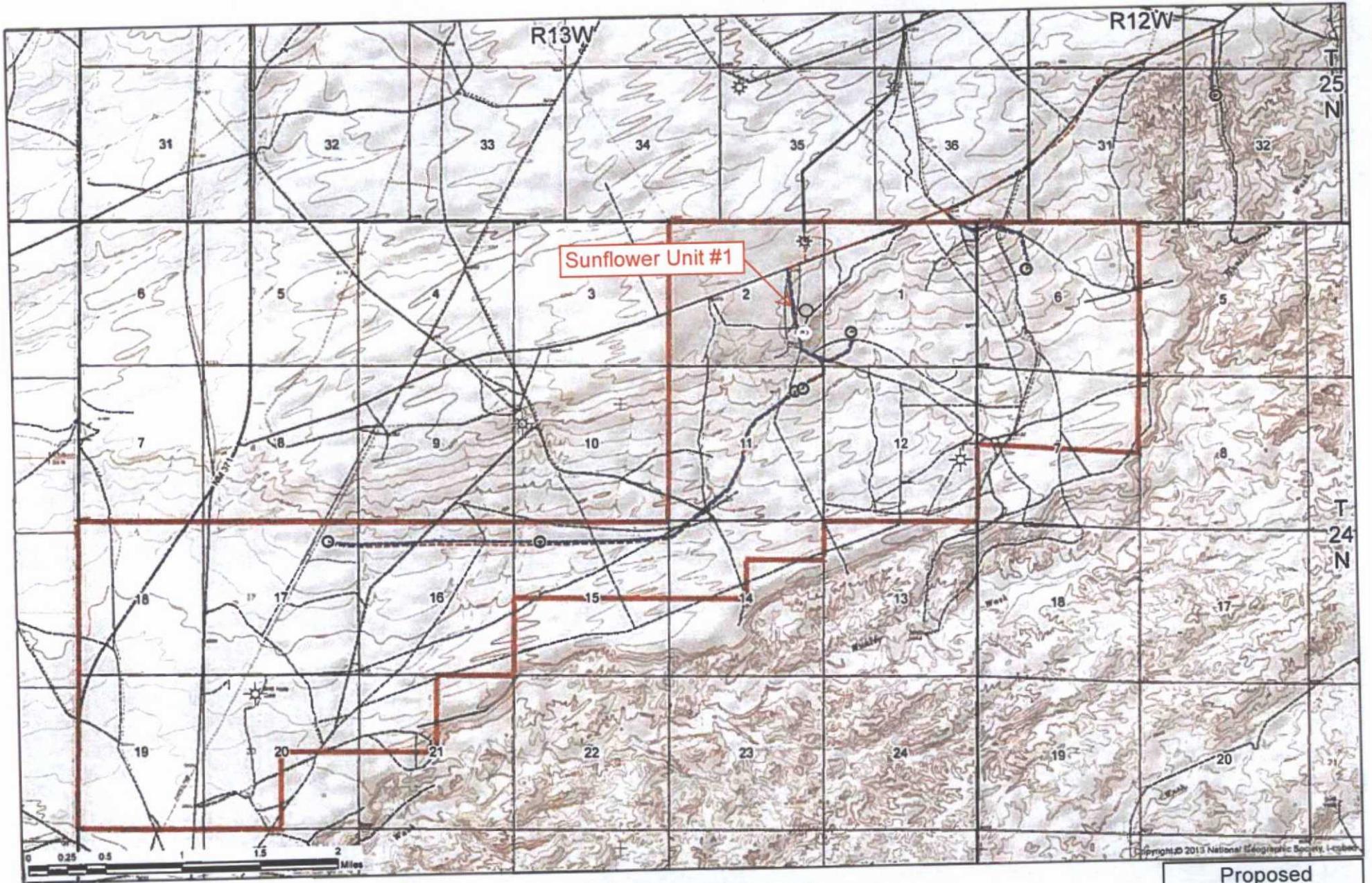
1654' FSL & 850' FEL, Section 2, T24N, R13W, N.M.P.M., San Juan County, NM

Latitude: 36.341432°N Longitude: 108.188339°W Datum: NAD1983

From the intersection of US Hwy 64 & State Hwy 371 in Farmington, NM, travel Southerly on State Hwy 371 for 28.5 miles to County Road #7250 @ Mile Marker 77.4;

Go Left (Easterly) on County Road #7250 for 3.7 miles to new access on right-hand side of roadway which continues for 1717.2' to staked Dugan Sunflower Unit #1 location.

EXHIBIT 3.

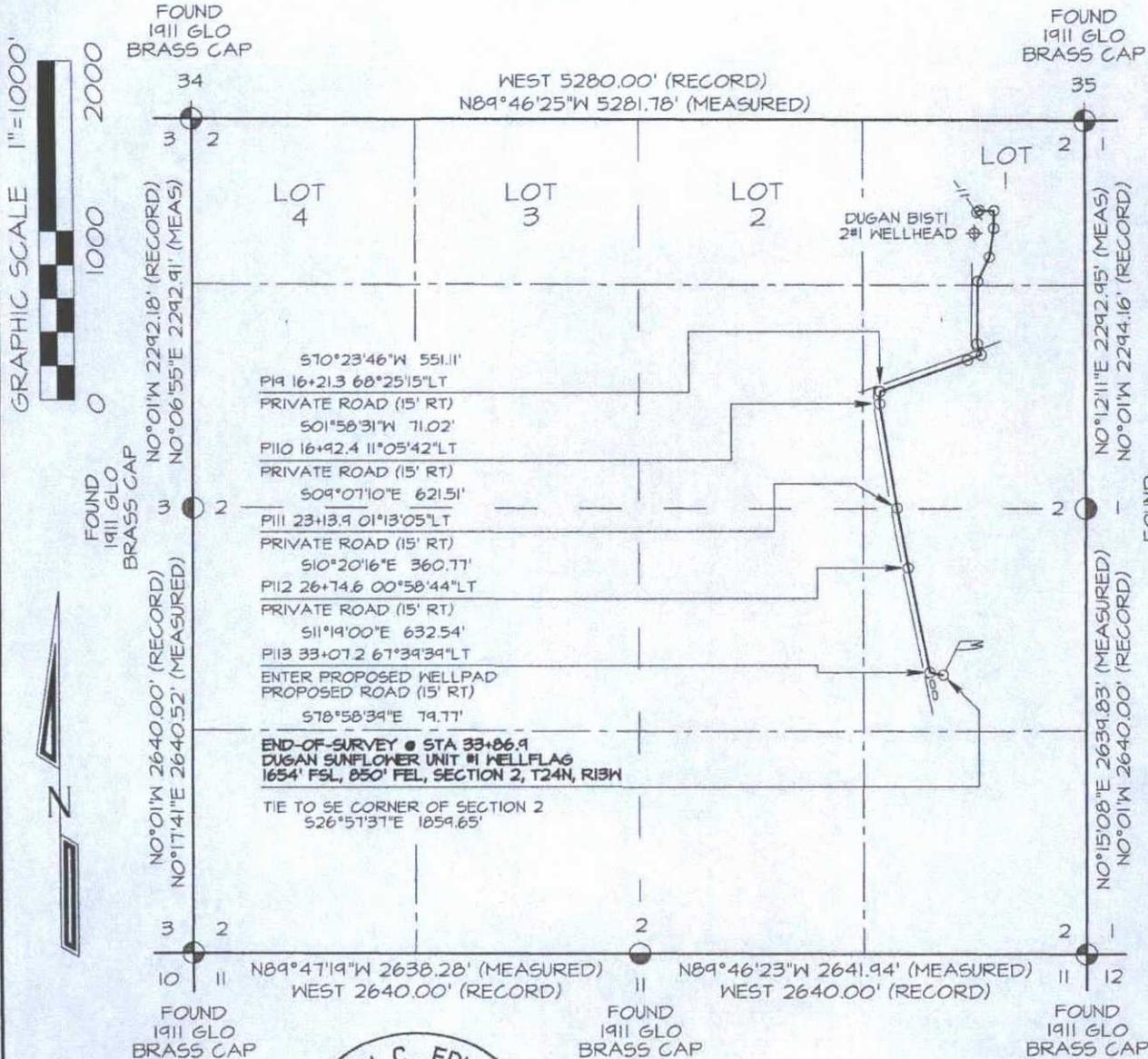


Dugan Production Corp.  
Sunflower Unit #1

Proposed  
Well Site ●  
Access Road - - -  
Pipeline - - -



# DUGAN PRODUCTION CORPORATION SUNFLOWER UNIT #1 PROPOSED PIPELINE SURVEY LOCATED IN THE E/2 E/2 OF SECTION 2, T24N, R13W, NMPM SAN JUAN COUNTY, NEW MEXICO



~ SURFACE OWNERSHIP ~  
Navajo Tribal Trust Land

0+00 TO 33+86.9	3386.9 FT / 205.3 RODS
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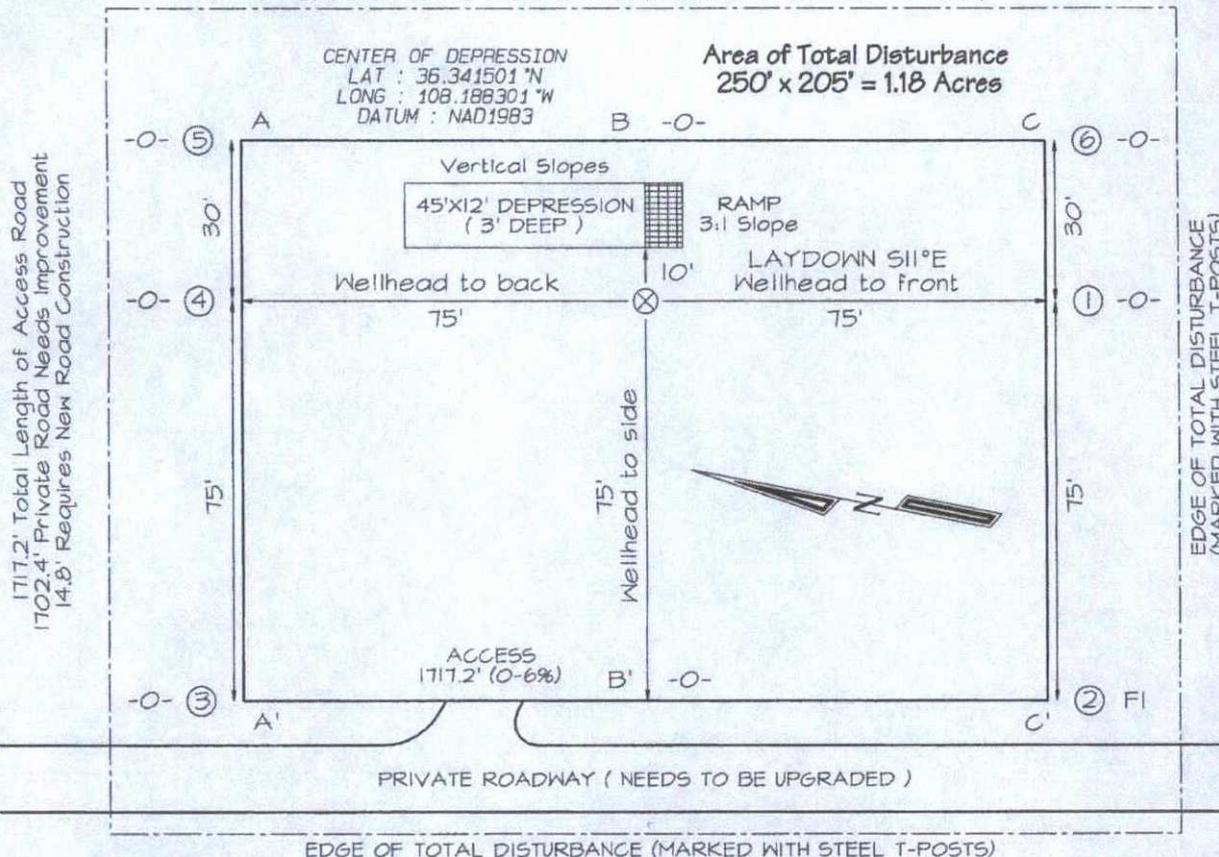
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SHEET 5 OF 8 FILENAME-E_24132P64	CHECKED BY: JCE DRAWN BY: JMM	<b>SURVEYS, INC.</b>

**DUGAN PRODUCTION CORPORATION SUNFLOWER UNIT #1**  
**1654' FSL & 850' FEL, SECTION 2, T24N, R13W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6297'**

EDGE OF TOTAL DISTURBANCE (MARKED WITH STEEL T-POSTS)



**LATITUDE: 36.341432° N**  
**LONGITUDE: 108.188339° W**  
 DATUM: NAD1983

PLAT NOTE:  
 \*SURFACE OWNER\*  
 Navajo Tribal Trust

Exhibit 5.

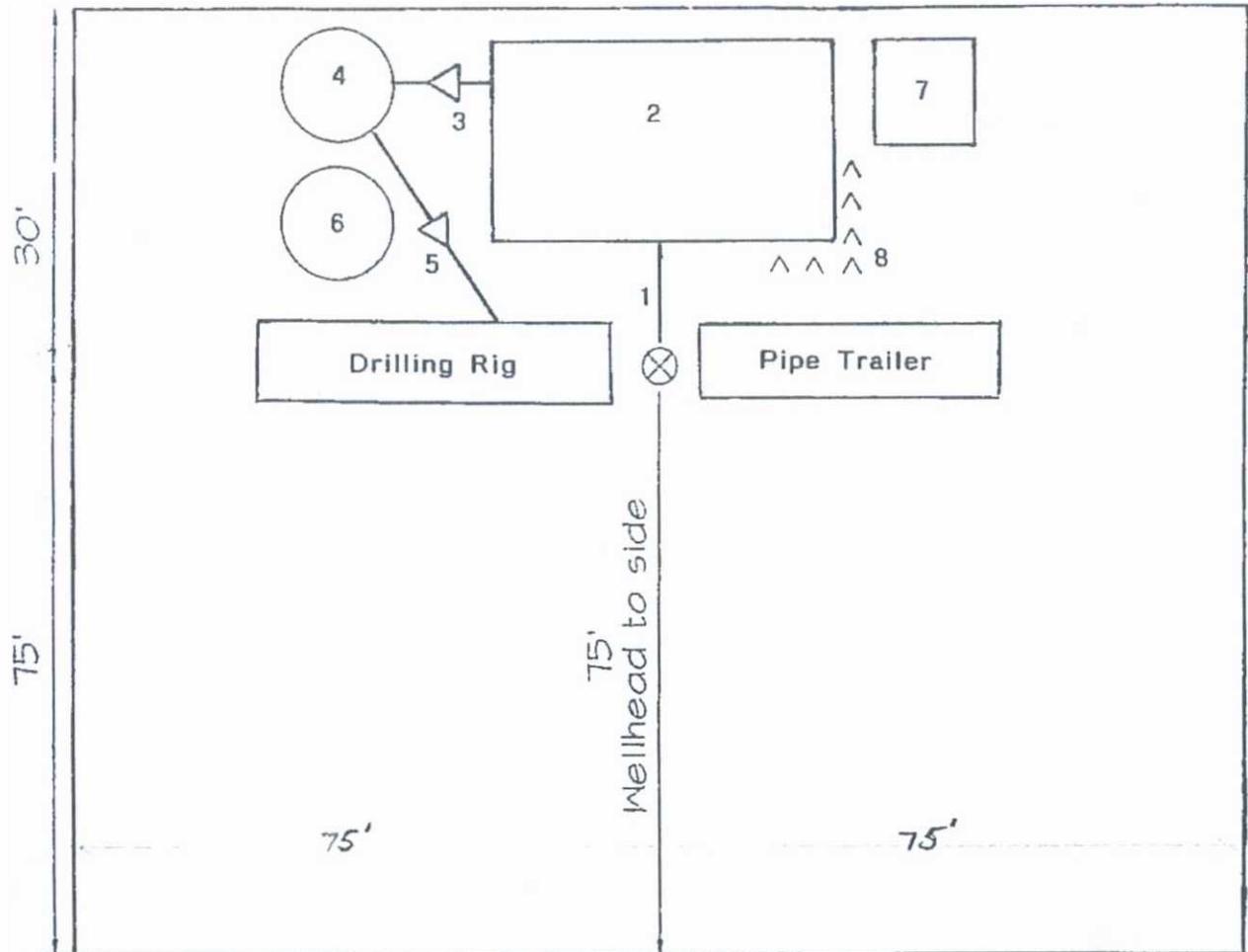
A-A'					
6307'					
6297'	—————				
6287'					

B-B'					
6307'					
6297'	—————				
6287'					

C-C'					
6307'					
6297'	—————				
6287'					

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

Dugan Production Corp.  
Sunflower Unit #1



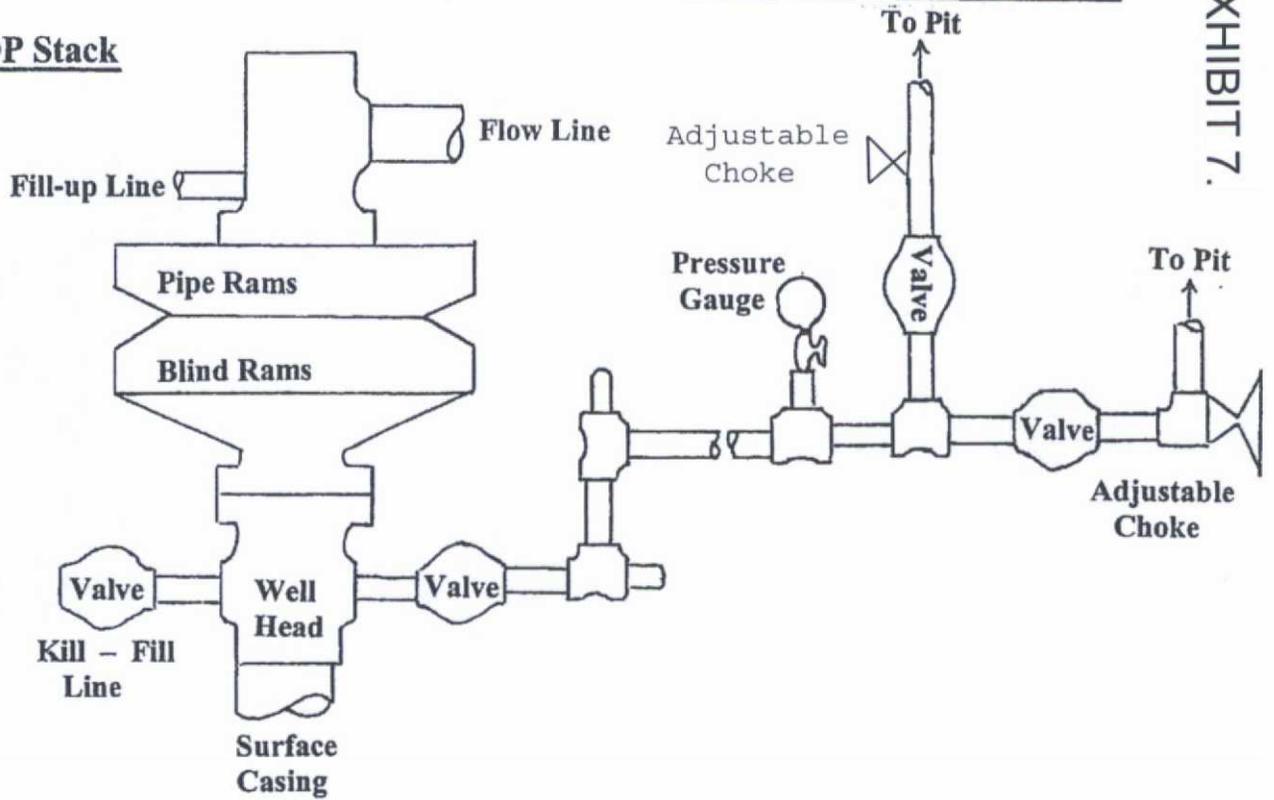
Closed Loop Drilling System

1. Flow line from well head to open-top steel tank.
2. Open-top steel tank with internal baffles (approx. 40-ft. long by 10-ft. wide and 4-ft. deep, 285-bbls.) set in an un-lined depression (approx. 45-ft. long by 12-ft. wide and 3-ft. deep).
3. Transfer pump to move drilling fluid from open-top steel tank to circulation / storage tank.
4. 400-bbls. circulation / storage tank.
5. Transfer pump to move drilling fluid from circulation / storage tank to drilling rig circulation system.
6. 400-bbls. fresh water storage tank.
7. 200—400-bbls. steel flow-back tank for collection of circulated cement returns and flow-back after frac.
8. 1-foot tall berm around perimeter of depression to prevent surface run-off water from entering depression.

# Well Control Equipment Schematic for 2,000 psi BOP

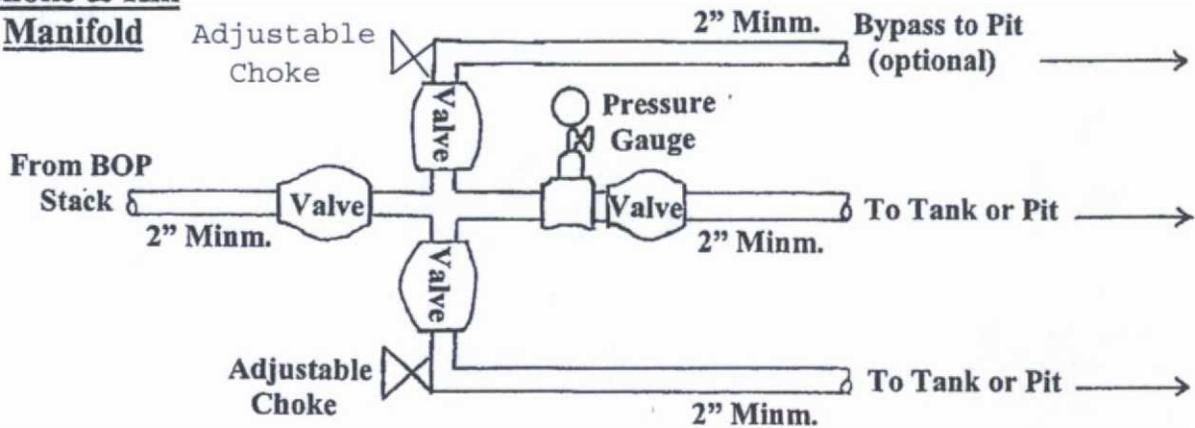
EXHIBIT 7.

## BOP Stack



## Choke & Kill

### Manifold



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

**DUGAN PRODUCTION CORP.**

Sunflower Unit #1

**Road Maintenance Plan**

Sunflower Unit #1  
Lease #NM-V-8294-1  
SESE of Section 2, T24N, R13W  
1166' FSL and 692' FEL  
San Juan County, New Mexico

The following Road Maintenance Plan will be implemented and followed by Dugan Production Corp. (Dugan) for Dugan's lease roads in the San Juan Basin, New Mexico. All roads will be constructed and maintained according to the Bureau of Land Management (BLM) Gold Book Standards and BLM Manuals 9113-1 (Roads Design Handbook) and BLM Manuals 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook).

**Road Inspection**

1. A Dugan representative or designated inspector will inspect all newly constructed or re-constructed roads that will be used to construct, operate, maintain and terminate Dugan's oil and gas operations in the San Juan Basin.
2. Road inspections will be conducted at a minimum once every 6-months or within 72-hours of a major storm event, or as deemed necessary. The inspector will observe road conditions as they drive to and from oil and gas operations.
3. Inspectors will examine the roadways and document the inspection using the attached checklist during each inspection. Inspections will include road crowns, culverts, ditches, silt traps and/or any other water control structures.
4. Inspection records will be kept on file and available to the BLM upon request.

**Maintenance Procedures**

1. Necessary corrections will be recorded on the attached checklist and Dugan will contact one of its personnel or contractors to correct the problem.
2. Road Crown - If the road crown and surface becomes rutted and does not drain properly, Dugan will have its personnel or contractor re-grade the surface and restore the road crown.
3. Culverts - If culverts or silt traps are plugged, Dugan will have its personnel or contractor clean out and remove debris or sediment plugging the culvert. If the culvert is damaged or the inlet/outlet ends are crushed, the culvert will be repaired or replaced.
4. Ditches and Turnouts - If the roadside ditches and turnouts become blocked or ineffective, Dugan will have its personnel or contractor clean and blade the ditches and turnouts so that they work properly.
5. Silt Traps and Water Control Structures - If silt traps or water control structures become blocked, Dugan will have its personnel or contractor clean out the traps and structures so that they work properly.
6. Disturbances from Maintenance – All maintenance will be conducted within permitted area. If necessary, areas disturbed during road maintenance will be re-seeded

**Dugan Production Corp. - Road Inspection and Maintenance Report Form**

Inspected Road Location:				
Inspector Name:		Inspector Title:		Date
Type of Area:		Access Road to Well Pad		
Inspection Type: ___ Daily; ___ Month (6-month); ___ Within 72-hours of a rain/snow event ___ Winter Conditions Exist; ___ Drought Conditions Exist.				
<b>Site Specific Information</b>				
<b>Road Conditions Check List</b>				
<b>Road:</b>	<b>Good</b>	<b>Poor</b>	<b>Action Needed</b>	<b>Comments</b>
Surface Condition (slopes/gravel/etc.)				
Surface Drainage				
Culvert(s)				
Culvert(s) Inlet				
Culvert(s) Outlet				
Roadside Ditches and Turnouts				
Run on Diversion				
Revegetation				
<b>Sediment Control:</b>	<b>Good</b>	<b>Poor</b>	<b>Action Needed</b>	<b>Comments</b>
Check Dam				
Silt Trap/Pond				
Filter Berm				
Sediment Basin				
Sediment Trap				
Wattles				
Silt Fence				
<b>Actions Taken</b>			<b>Date Work Was Performed</b>	
<b>Type of Inspection</b>	<b>Date</b>	<b>Signature</b>		

Signature certifying that the site is in compliance (after necessary repairs, maintenance and changes

\_\_\_\_\_ Date

\_\_\_\_\_ Signature