State of New Mexico
Energy, Minerals and Natural Resources Department

**Susana Martinez**
Governor

**David Martin**
Cabinet Secretary

**Brett F. Woods, Ph.D.**
Deputy Cabinet Secretary

**David R. Catanach, Division Director**
Oil Conservation Division

New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 2-25-14
Well information;
Operator Vision Energy, Well Name and Number Navajo 18 #59
API# 30-045-35589, Section 7, Township 29 (N)/S, Range 16 E/(W)

Conditions of Approval:
(See the below checked and handwritten conditions)

- ✓ Notify Aztec OCD 24hrs prior to casing & cement.
- o Hold C-104 for directional survey & "As Drilled" Plat
- o Hold C-104 for NSL, NSP, DHC
- o Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ✓ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
  - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
  - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
  - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- o Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ✓ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ✓ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ✓ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

Chad Hill
NMOCD Approved by Signature

3-12-2015 KC
Date

RECEIVED
MAR 06 2015
NMOCD
DISTRICT III

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

5. Lease Serial No.
I-89-IND-58

6. If Indian, Allotee or Tribe Name
NAVAJO NATION

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
N/A

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
NAVAJO 18 #59

KP

2. Name of Operator VISION ENERGY GROUP LLC

9. API Well No.
30-045- 35589

3a. Address 39 OLD RIDGEBURY ROAD
DANBURY CT 06810

3b. Phone No. *(include area code)*
(203) 837-2536

10. Field and Pool, or Exploratory
HOGBACK DAKOTA

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface M 1150' FSL & 218' FWL
At proposed prod. zone SAME

11. Sec., T. R. M. or Blk. and Survey or Area
SWSW 7-29N-16W

14. Distance in miles and direction from nearest town or post office*
4 AIR MILES SW OF WATERFLOW, NM

12. County or Parish
SAN JUAN

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)
1,490'

16. No. of acres in lease
4,800

17. Spacing Unit dedicated to this well
SWSW

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
541' (18 #54)

19. Proposed Depth
775'

20. BLM/BIA Bond No. on file
015037275

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5,051' UNGRADED

22. Approximate date work will start*
06/01/2014

23. Estimated duration
1 WEEK

24. Attachments

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

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

25. Signature [signature] Name *(Printed/Typed)* BRIAN WOOD (PHONE: 505 466-8120) Date 02/25/2014

Title CONSULTANT (FAX: 505 466-9682)

Approved by *(Signature)* [signature] Name *(Printed/Typed)* Date 3/4/15

Title AFM Office FFO

Application approval does not warrant or certify that 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.

(Continued on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

*(Instructions on page 2)

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

NMOCD

District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575)393-6161 Fax (575)393-0720
District II
811 S. First St., Artesia, NM 88210
Phone (575)748-1283 Fax (575)748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505)334-6178 Fax (505)334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505)476-3460 Fax (505)476-3462

# State of New Mexico
## Energy, Minerals & Mining Resources Department
# OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C - 102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

| 1 API Number | 2 Pool Code | 3 Pool Name |
|---|---|---|
| 30-045- | 32680 | Hogback Dakota |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| 310164 | Navajo 18 | 59 |

| 7 OGRID No. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 280962 | Vision Energy Group LLC | 5051' |

10 Surface Location

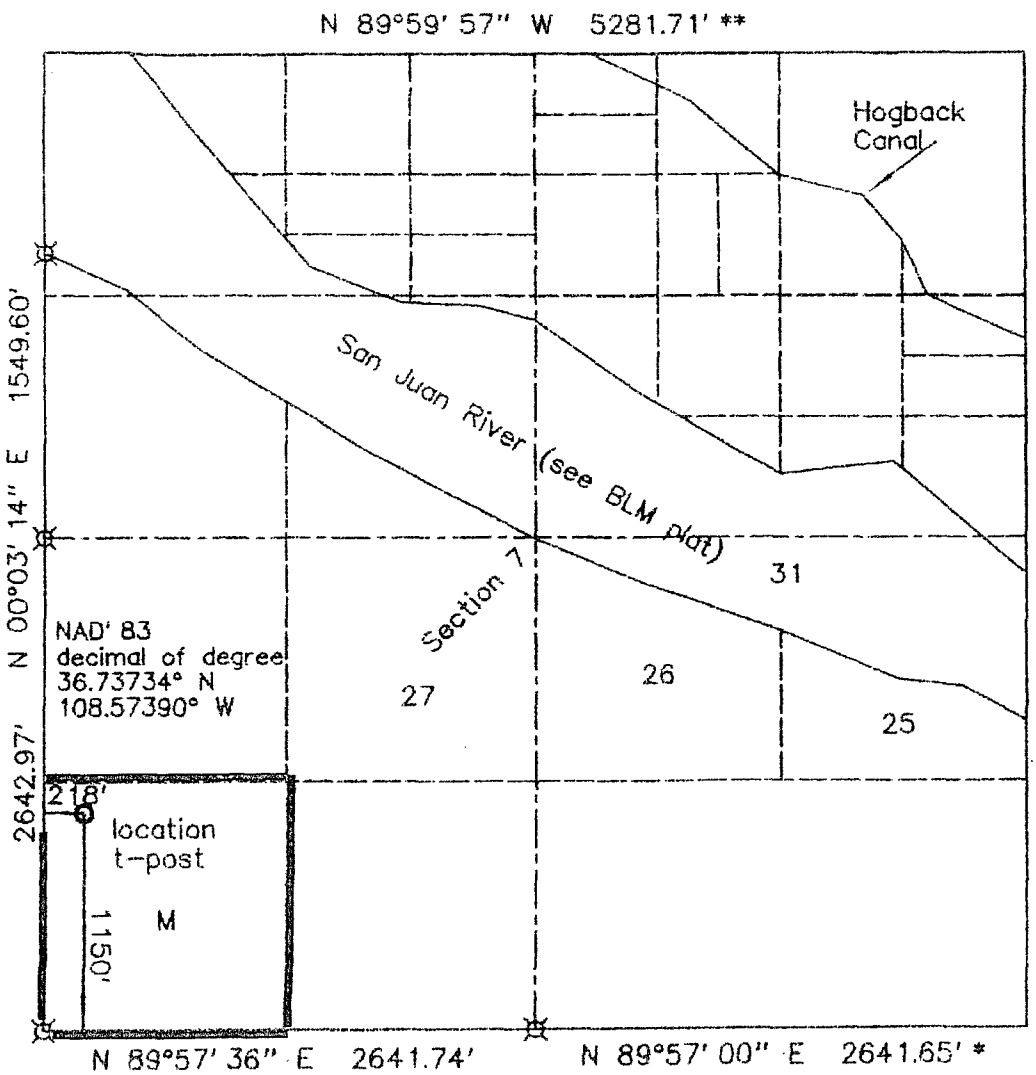
| UL or Lot | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| M | 7 | 29 N. | 16 W. | | 1150' | SOUTH | 218' | WEST | SAN JUAN |

11 Bottom Hole Location If Different From Surface

| UL or Lot | Section | Township | Range | Lot Idn. | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| 40 | | | |

No allowable will assigned to this completion until all interests have been consolidated or a non standard unit has been approved by the division.




⌑ BLM/GLO monument
* from 2008 BLM
** calculated

### 17 OPERATOR CERTIFICATION

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

2-25-14

Signature Date

Brian Wood

Printed Name

brian@permitswest.com

E-mail Address

### 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.

11/25/2013

Date of Survey

Signature and Seal of Professional Surveyor

GERALD E. HESTON
6844
REGISTERED LAND SURVEYOR

Certificate Number 6844

Vision Energy Group LLC
Navajo 18 #59
1150' FSL & 218' FWL
Sec. 7, T. 29 N., R. 16 W.
San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

| Formation Name | GL Depth | KB Depth | Elevation |
|---|---|---|---|
| Mancos shale | 0' | 5' | +5,051' |
| Juana Lopez | 241' | 246' | +4,810' |
| Greenhorn limestone | 636' | 641' | +4,415' |
| Graneros shale | 701' | 706' | +4,350' |
| Dakota sandstone | 746' | 751' | +4,305' |
| Total Depth (TD) | 775' | 780' | +4,276' |

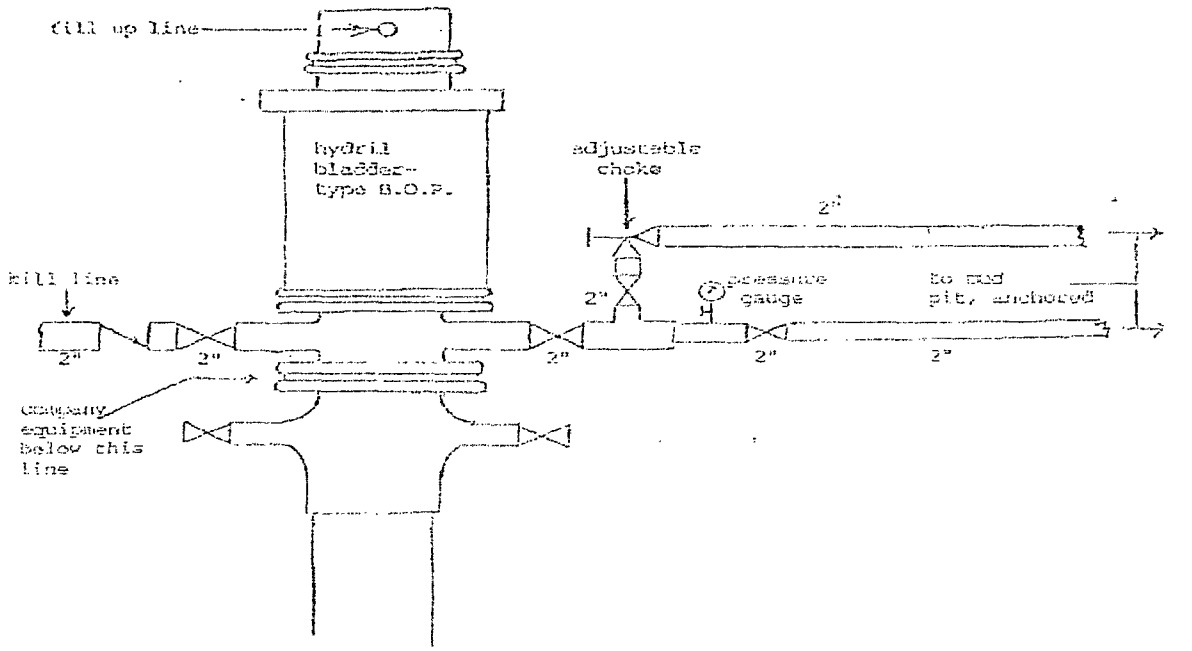
2. NOTABLE ZONES

| Gas & Oil Zone | Water Zone | Other Mineral Zone |
|---|---|---|
| Dakota | N/A | N/A |

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded.

3. PRESSURE CONTROL

Maximum expected bottom hole pressure is ≈200 psi. A diagram of a typical 2,000-psi Hydril bladder type BOP system is on Page 2. System will include an upper Kelly cock valve with handle available and a safety valve and subs to fit all in use strings. All checks of the BOP stack and equipment will be noted on the daily report. Vision is requesting a variance from 2 chokes due to the shallow depth, low formation pressure, and previous drilling experience in this area has shown no formation gas.




4. CASING & CEMENT

| Hole O. D. | Casing O. D. | #/foot | Grade | Threads | Age | Depth Set |
|---|---|---|---|---|---|---|
| 8.75" | 7" | 20 | K-55 | LC | New | 200' |
| 6.25" | 4.5" | 10.5 | K-55 | LC | New | 775' |

Surface casing will be cemented to the surface with 60% excess. Will use 36 sacks (49.32 cubic feet) Type III or equivalent + additives mixed at 1.37 cubic feet per sack and 14.6 pounds per gallon. Three centralizers will be evenly spaced.

W. O. C. = 12 hours. Casing will be pressure tested to 600-psi for 30-minutes. A notched 7" collar will be used as the casing shoe. Eighty psi will be held on the

surface pipe to hold cement in the annulus. Cement will be circulated to the surface and will be topped off with Type III neat as needed.

Production casing will be cemented to surface with 60% excess. Casing shoe will be placed on the bottom joint with a float collar placed 1 joint above the casing shoe joint. Twenty barrels of fresh water will be circulated ahead of the cement. A single stage of 40 sacks (117 cubic feet) of premium light with FM HS will be mixed at 3.26 cubic feet per sack and 12.5 pounds per gallon. W. O. C. = 12 hours

Centralizers will be placed on the shoe joint, before and after the float collar, and every third joint to the surface casing.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Cr | Collapse | | | | | | | |
| Burst | Yield * 80% | | | | | | | |
| | | | | | | | | |
| Mud Weight | 9.5 | | | | | | | |
| Constant | 0.052 | | | | | | | |
| TVD | 850 | Production Casing | | | | | | |
| TVD | 200 | Surface Casing | | | | | | |
| | | | | | | | | |
| | | Size | Grade | weight lbs/ ft | Cr | Yield | Yield % | @ 80% Yield |
| Casing | | 4.5 | K-55 | 10.5 | 4010 | 4790 | 80% | 3832 |
| | | 7 | K-55 | 20 | 2270 | 3740 | 80% | 2992 |
| | | | | | | | | |
| Formula | CR/( constant*TVD*Wm) Pass if greater than 1.25 | | | | | | | |
| | | | | | | | | |
| Production | | | 9.549892832 | > | 1.25 | | PASS | |
| Surface | | | 22.9757085 | > | 1.25 | | PASS | |

5. MUD PROGRAM

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight is 9.5 pounds per gallon. Sufficient material to maintain mud properties, control lost circulation, and contain a well control problem will be available at the well while drilling.

6. CORES, TESTS, & LOGS

No cores, tests, or logs are planned.

7. DOWN HOLE CONDITIONS

No abnormal temperature, pressure, or H2S are expected. Maximum bottom hole pressure will be ≈200-psi.

8. MISCELLANEOUS

Anticipated spud date is upon approval. It is expected it will take ≈4 days to drill the well and ≈2 days to complete the well.

Once the top of the Dakota formation is reached, then production casing will be set. We will then circulate the hole once the cementing is done and set for 12 hours. We will nipple up mud cross and B.O.P with mate up flange from tubing head. We will pick up 3-¾ inch rock drill bit with production string 2-3/8", J-55 tubing, and SN, and drill through float collar, cement and 3 to 4 feet into Dakota formation until good oil show back to pit. Heated $CO_2$ vapor will be used at this point for drilling to keep air and water off the formation.

Surface Use Plan

1. DIRECTIONS & ROADS (See PAGES 10 - 13)

From the NM 371 San Juan River bridge in southwest Farmington...
Go Southwest for 0.7 miles on NM 371
Then turn right and go West 20 miles on paved N-36 to Mile Post ≈8.6
Turn right at a cattle guard and go NW 1/10 mile on a dirt road
Then turn right and go North 0.4 mile to a tank battery
Then turn right and go NW 100 yards across a bridged canal
Then turn right and go East 100 yards on a dirt road
Then turn left and go North 1/8 mile on a dirt road
The turn left at a gate and go Northwest 1/4 mile on a dirt road
Then turn left and go Southwest 1/8 mile on a dirt road
Then turn right and go Northwest 76.83' cross-country to the proposed pad

Roads will be maintained to at least equal their present condition.

2. ROAD TO BE BUILT OR UPGRADED (See PAGES 12 & 13)

The 76.83' of new road will be built to BLM Gold Book standards. Road will have a ≈14' wide running surface and will be rocked as needed. Upgrade of the existing road will consist of rocking where needed. A cattle guard will be installed at the gate. No culvert or vehicle turn out is needed. Maximum disturbed width = 20'. Maximum cut or fill = 1'. Maximum grade = 1%. (New road will parallel proposed pipe and power lines.)

3. EXISTING WELLS (See PAGE 11)

Ten oil wells, 1 disposal well, 1 oil well that is being completed, and 34 plugged wells are within a mile radius. There are no gas, water, or injection wells within a mile.

4. PROPOSED PRODUCTION FACILITIES (See PAGES 12 & 13)

A 748.60' long power line and a 748.60' long ≈2" O. D. poly pipeline will be buried 36" deep in the same trench southeast and then northeast along the road to Vision's existing buried pipeline and power line system.

5. WATER SUPPLY

Water will be trucked from Waterflow or Kirtland.

6. CONSTRUCTION MATERIALS & METHODS

NM One Call (1-800-321-ALERT) will be called ≥72 hours before construction starts. Top 6" of soil will be piled southwest of the pad and separate from the pit subsoil. Slopes will be no steeper than 3 to 1.

7. WASTE DISPOSAL

A ≥20 mil plastic liner will be installed in the reserve pit. The pit will be fenced sheep tight on 3 sides with woven wire fence topped with barbed wire. The fourth side will be fenced once the rig moves off. The fence will be kept in good repair while the pit dries. Once dry, pit contents will be buried in place.

# DRILLING CONDITION OF APPROVAL

| | |
|---|---|
| Operator: | Vision Energy Group LLC |
| Lease No.: | I-89-IND-58 |
| Well Name: | Navajo 18 #59 |
| Well Location: | Sec. 7, T29N, R16W; 1150' FSL & 218' FWL |

The review of the drilling proposal submitted indicated that the operator is requesting a variance from 2 chokes. **The use of 2 adjustable chokes will be required for a 2M BOPE system per Onshore Order #2.**

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

U.S. DEPARTMENT OF THE INTERIOR
MARCH 3, 1849