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**

NMOCD Approved by Signature

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 <u>3160-3</u> APD form.
Operator Signature Date: 2-28-14 Well information; Operator Vision Energy, Well Name and Number Navojo 18 #61
API# $30-045-35572$, 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.
 Hold C-104 for directional survey & "As Drilled" Plat Hold C-104 for NSL, NSP, DHC
 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
 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.

OIL CONS. DIV DIST. 3

DEC 3 0 2014

Form 3160-3 (March 2012)

> UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

JUL 02 20 4

5. Lease Serial No.

BUREAU OF LAND MA	MACEME	NIT Carrottic (O	n Field	1-89-IND-58		
APPLICATION FOR PERMIT TO	DRILL	OR REENTER LE	nd Milin	3,63,1fj.Indian, Alloted NAVAJO NATION	or Tribe Name	
la. Type of work:	7 If Unit or CA Agr	eement, Name and No.				
lb. Type of Well: Oil Well Gas Well Other	V	Single Zone Multip	ole Zone	8. Lease Name and NAVAJO 18 #61	Well No.	
2. Name of Operator VISION ENERGY GROUP LLC				9. API Well No. 30-045-	572	
3a. Address 39 OLD RIDGEBURY ROAD DANBURY CT 06810	3b. Phone (203) 83	No. (include area code)		10. Field and Pool, or Exploratory HOGBACK DAKOTA		
4. Location of Well (Report location clearly and in accordance with At surface 777' FSL & 1256' FWL	any State requ	irements.*)		11. Sec., T. R. M. or 1 SWSW 7-29N-16V	Blk.and Survey or Area V	
At proposed prod. zone SAME						
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* 1,863' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	property or lease line, ft.				well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 750' 015037			BIA Bond No. on file* 275		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		oximate date work will star	rt*	23. Estimated duration		
5,052' UNGRADED	06/01/2	ttachments	· ·	1 WEEK		
The following, completed in accordance with the requirements of Onsh			toched to the	is form		
	note Off and C			•		
Well plat certified by a registered surveyor. A Drilling Plan.		4. Bond to cover the Item 20 above).	ne operation	ns unless covered by ar	n existing bond on file (see	
3. A Surface Use Plan (if the location is on National Forest Syster SUPO must be filed with the appropriate Forest Service Office).	m Lands, the			ormation and/or plans a	s may be required by the	
25. Signature Name (Printed/Typed) BRIAN WOOD (PHONE: 505				466-8120)	Date 02/28/2014	
Title CONSULTANT		(FA)	X: 505 466	5-9682)	,	
Approved by (Signature) Manke (ex	Na	me (Printed/Typed)		,	Date 12/24/14	
Title AFN	Off	fice FFO				
Application approval does not warrant or certify that the applicant ho conduct operations thereon. Conditions of approval, if any, are attached.	olds legal or e	quitable title to those righ	ts in the sub	ject lease which would	entitle the applicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make Atjan States any false, fictitious or fraudulent statements or representations a	repime/for and	Operson (knowingly And V er within its jurisdiction. L	FIRE A	iake to any department ND This action is		
		ODTAINING, ANY	OTHER	TOUGH IS	Subject	

(Continued on page 2) DRILLING OPERATIONS **AUTHORIZED ARE SUBJECT TO** COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

representations as to any matter within its jurisdiction. LESSEE AND
ACTION DOES NOTE Within its jurisdiction. LESSEE AND
This action is subject to declarate and proceduate to declarate and proceduate to declarate and proceduate to declarate to declara

ON FEDERAL AND INDIAN LANDS

pursuant to 43 CFR 3165.4

MNOCD ~

District | 1625 N. French Dr., Hobbs, NM 88240 Phone (575)393-6161 Fax (575)393-0720 District II 811 S. First St. 811 S. Frist St. , Artesia, NM 88210 Phone (575)748-1283 Fax (575)748-9720 District JII 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

Energy, Minerals & Mining Resources Department OIL CONSERVATION DIVISION =7

1220 South St. Francis Dr. Santa Fe, NM 87505

Form C - 102 Revised August 1, 2011

Submit one copy to appropiate District Office

JUL 02 2014 AMENDED REPORT

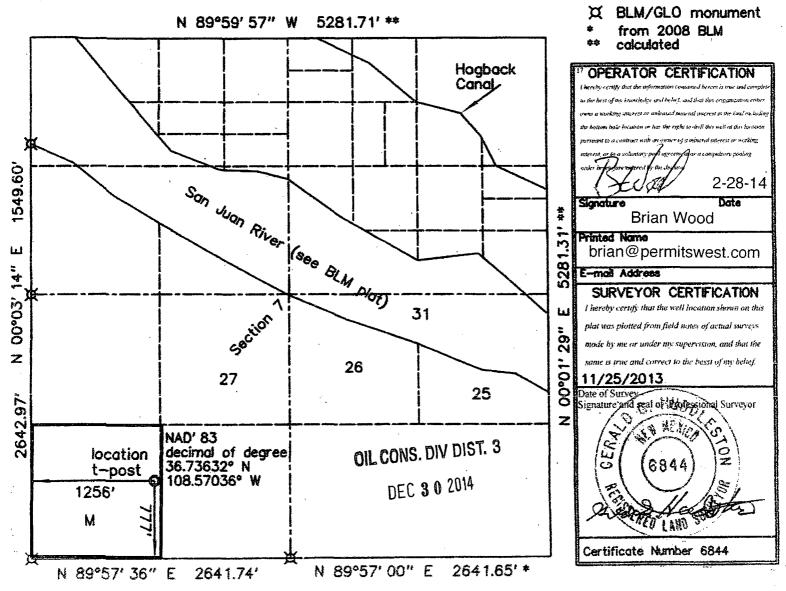
WELL LOCATION AND ACREAGE DEDICATION PLAT

State of New Mexico

		F9		
¹ API Number 30-045- 35572	² Pool Code 32680	ਵਿਜਾਜਗਜ਼ਹੀਸ਼ ਜਿਵਦ Office ਮਿੰਨਿਉਂback-Đakktaranemen		
⁴ Property Code 31016 § 4	⁵ Property Name Navajo 18	⁶ Weil Number 61		
⁷ OGRID No. 280962	⁸ Operator Name Vision Energy Group L	Elevation 5052'		
	10 Surface Lacation			

North/South line UL or Lot Section Township Lot Idn. Feet from the Feet from the East/West line Range 7 M 29 N. 16 W SOUTH 1256 777' WEST SAN JUAN Bottom Hole Location If Different From Surface Lot Idn Feet from the North/South line Feet from the UL or Lot Section Township Range East/West line County 12 Dedicated Acres 13 Joint or Infill Consolidation Code 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.



Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	<u>GL Depth</u>	KB Depth	<u>Elevation</u>
Mancos shale	0'	5'	+5,052'
Juana Lopez	216'	221'	+4,836'
Greenhorn limestone	637'	642'	+4,415'
Graneros shale	682'	687'	+4,370'
Dakota sandstone	722'	727'	+4,330'
Total Depth (TD)	750'	755'	+4,302'

2. NOTABLE ZONES

Gas & Oil Zone	<u>Water Zone</u>	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.



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							
T'VD	850	Production Casing						
TVD	200	Surface Casing						
				weight			Yield	@ 80%
		Size	Grade	lbs/ ft	Cr	Yield	%	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 \approx 4 days to drill the well and \approx 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 $3-\frac{3}{4}$ inch rock drill bit with production string $2-\frac{3}{8}$, 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.



3. EXISTING WELLS (See PAGE 11)

Ten oil wells, 1 disposal well, 1 oil well that is being completed, and 35 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 266.65' long power line and a 266.65' long \approx 2" O. D. poly pipeline will be buried 36" deep in the same trench northeast along the new road to Vision's existing buried pipeline and power line system at the Navajo 18 #55 well.

5. WATER SUPPLY

Water will be trucked from Waterflow or Kirtland.

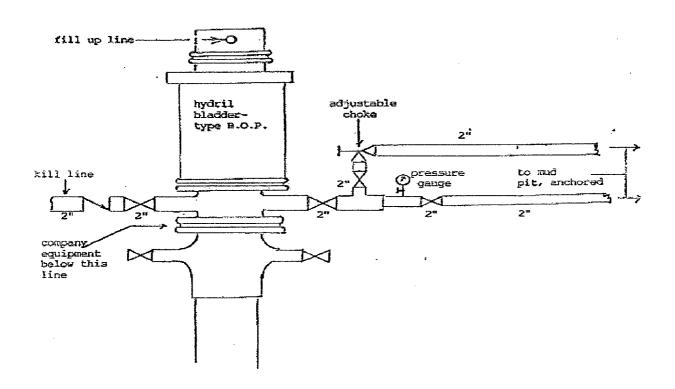
6. CONSTRUCTION MATERIALS & METHODS

NM One Call (1-800-321-ALERT) will be called ≥ 72 hours before construction starts. Top 6" of soil will be piled south of the pad and separate from the pit subsoil. Slopes will be no steeper than 3 to 1. A diversion ditch will be cut on the south and west sides of the pad and south of the soil piles.

7. WASTE DISPOSAL

A \geq 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.





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	750'

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

