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 Road, Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u>

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101 Revised November 14, 2012

Energy Minerals and Natural Resources

Oil Conservation DivisioRECEIVED

1220 South St. Francis Dr. NOV 18 2013

Santa Fe, NM 87505

7□AMENDED REPORT

1 110110. (303) 170	2 1110 2 2011 (2102	,, 1,0 5 10 2					i natali	JUL ART	ESIA	
APPLI	CATIC	N FOI	R PERMIT T	O DRILL,	RE-ENT	ER, DE	EPEN, I	PLUGBAC	K, OR A	DD A ZONE
			1. Operator Name	and Address					² OGRID N	umber
;			COG Operati 2208 West Ma	ing LLC ain Street	` \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				22913	
			Artesia, NM					150-6	<i>)/\</i> S -	7/800
4 Prop	erty Code	9		Co	Property Nan Prsair 2 State S	ne WD		·		^{o.} Well No 1.
				⁷ . Sι	ırface Loca	ition				,
UL – Lot	Section	Township	Range	Lot Idn	Feet from	N/S	S Line	Feet From	E/W Line	County
1	2	19S	31E	ĺ	250'	N	orth	800'	East	Eddy
				8. Propos	ed Bottom	Hole Loca	tion			
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S	S Line	Feet From	E/W Line	County
	·			9. Pc	ool Informa	ition				
				Pool	Name			· · · · · · · · · · · · · · · · · · ·		Pool Code
SWD; Devonia	n							<u> </u>		96101
				Addition	al Well Inf					
	rk Type Well		12. Well Type SWD		13. Cable/Rota	nry	14.	Lease Type State	15	Ground Level Elevation
16. Multiple 17. Proposed Depth				18 Formation 19 Contractor		Contractor	20. Spud Date			
N 14,350' Devonian						n				12/1/2013
Depth to Grou	und water		Dista	nce from nearest	fresh water we	-11		Distance	to nearest sur	face water
			21.	Proposed Ca	sing and C	ement Pro	ogram	-		
	7	G. T	G : 6:	G : W	: 1./6	0.44	D 4	0 1 6		F :: 1700

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17.5	13.375	54.5	825'	1150	
Intrmd	12.25	9.625	40.	3000'	1900	0
Production	8.75	7	29	12900'	2400	2500
Disposal	6.125	ОН		14350'		

Casing/Cement Program: Additional Comments

Plan to drill a 17-1/2" hole to 825' with Fresh Water. Run 13-3/8", 54.5#, J-55 and cement to surface. Drill 12-1/4" hole to approximately 3000' with brine, and run 9-5/8", 40#, J-55/ N80 csg and cement to surface. Drill 8-3/4" hole to approximately 12,900' with cut brine, run 7", 29#, N80 and cement back to 2500'. Drill 6-1/8" hole to approximately 14,350' with cut brine, and leave it open hole for salt water disposal purposes.

 22. Proposed Blowout Prevention Program

 Type
 Working Pressure
 Test Pressure
 Manufacturer

 Double Ram
 5000
 5000
 Cameron

^{23.} I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION				
I further certify that I have complied with 19.15.14.9 (A) NMAC \(\text{and/or} \) 19.15.14.9 (B) NMAC \(\text{N} \), if applicable. Signature:	Approved By: J. C. Shapard				
Printed name: Mayte Reyes	Title: "Geologist" / /				
Title: Regulatory Analyst	Approved Date: /1/18/20/3 Expiration Date: /1//8/20/5				
E-mail Address: mreyes1@concho.com					
Date: 11/18/2013 Phone: 575-748-6945	Conditions of Approval Attached				

DISTRICT II 811 S. FIRST ST., ARTESIA, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

State of New Mexico DISTRICT I

1825 N. PRENCH DR., HOBBS, NN 88240
Phone: (1875): 393-6181 Fair (576): 393-0720

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA PE, NM 67505 Phone: (505) 476-3460 Fax: (505) 476-3462

- House, (600) 470 5400 401, (500) 470 5401		ACREAGE DEDICATION PLAT	
30-015- 4/805	Pool Code 96101	Pool Nam SWD; Devonia	
40229		erty Name 2 STATE SWD	Well Number
0GRID No. 229137	Oper COG OPE	ator Name RATING, LLC	Elevation 3632.7'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	2	19-S	31-E		250	NORTH	800	EAST	EDDY

Bottom Hole Location If Different From Surface

	2.0			Tanggar an na manan	entande maranda etan	2,		
UL or lot No.	Section Town	ship Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infil	l Consolidation	Code Or	der No.				
N/A								

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

LOT 4 LOT 3 LOT 2 SURACE LOCATION Y=617263.8 N X=65373.0.1 E LAT=22.695961 N LONG=103.833613 W 39.89 AC. 39.89 AC. JOHN AC. LOT 1 S.L. OPERATOR CERTIFICATION Providing inferest organization etitles organization			i		
AMD 27 SURFACE LOCATION Y=617263.8 N X=653730.1 E LAI = 32,65561 N LONG = 103.833613 W 39.78 AC. 39.89 AC. 39.80	LÖT 4	LOT 3	LOT "2	250	OPERATOR CERTIFICATION
Suppose the state of the land including the proposed bottom hade location including the proposed bottom hade location including the proposed bottom hade location including the proposed bottom had location including the proposed bottom proposed by a proposed bottom had location proposed by a proposed bottom had location proposed by a proposed by a proposed bottom had location had location proposed by a proposed			SURFACE LOCATION	o - 800'	herein is true and complete to the best of my knowledge and belief, and that this
39.78 AC. 39.89 AC. 39.80 AC. 39.89 AC. 39.80 AC.			X=653730.1 E		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
39.89 AC. Signature Date Printed Name Marker Comho Co E-mail Address SURVEYOR CERTIFICATION I hereby-certify that the well location shown on this plat was plotted from tield motes of actual surveys made by the or is true and correct to the best of my bedief. SEPTEMBER 5. 2013 Date of Survey Signature & Seal of Professional Surveyor 17777 CHARCAD 17777 Certificate No. CHAB BARCROW 17777			LONG.=103.833613* W	LOT 1	or to a valuntary pooling agreement or a
Printed Name Marker Comho Co 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 i under my supervision, and that the same is true and correct to the best of my belief. SEPTEMBER 5. 2013 Date of Survey Signature & Seal of Professional Surveyor ARROW 17777 CETUICATE NO. CHAD HARGROW 17777	39,78 AC.	39.85 AC.	39.89 AC:	39.89 AC.	by the division.
SURVEYOR. CERTIFICATION I bereby certiff that the well location shown on this pilat 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. SEPTEMBER 5. 2013 Date of Survey Signature & Seal of Professional Surveyor HARCR MEX. 17777 Certificate No. CHAD HARCROW 17777					Melanie Harker
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. SEPTEMBER 5. 2013. Date of Survey Signature & Seal of Professional Surveyor HARCRO 17777. Certificate No. CHAD HARCROW 17777.					moarker@comho.co
under my supervision, and that the same is true and correct to the best of my belief. SEPTEMBER 5. 2013. Date of Survey Signature & Seal of Professional Surveyor HAR PARTY OF THE SEAL OF THE SEA	-		<u> </u>		I hereby certify that the well location shown on this plat was plotted from field
Date of Survey Signature & Seal of Professional Surveyor HARCA MEXILIAR 17777 Certificate No. CHAD HARCROW 17777					under my supervision, and that the same is true and correct to the best of my belief.
17777 S Certificate No. CHAD HARCROW 17777	\$ 1		1		
17777 & 17777 & Certificate No. CHAD HARCROW 17777					Signature & Seal of Professional Surveyor
Certificate No. CHAD HARCROW 17777					HARCAO MEXICA
Certificate No. CHAD HARCROW 17777					17777
					Charl Harmon Alglis

SECTION 2, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M., NEW MEXICO EDDY COUNTY 600' ALL FFATURES ARE EXISTING UNLESS OTHERWISE NOTED SECTION 35 SECTION 02 170' NORTH NE COR. NW COR. **OFFSET** WELL PAD WELL PAD 3632.1' 3630.3' 3632.1' ELECTRIC LINE CORSAIR 2 STATE SWD #1 190' EAST OFFSET \odot 3632.6' ELEV - 3632.7" 150' WEST $LAT = 32.695961^{\circ} N$ **OFFSET** LONG.= 103.833613° W 3631.2' SW COR. CALICHE RD WELL PAD-SE COR. 170' SOUTH 3632.4 WELL PAD **OFFSET** 3630.1' 3632.7 ELECTRIC LINE CORSAIR ST COM #1 PAD

DIRECTIONS TO LOCATION:

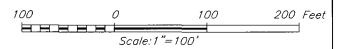
HEADING SOUTH ON CR #222 (SHUGART RD) TURN LEFT (EAST) ONTO WESTALL ROAD AND GO APPROX. 2.4 MILES TO PROPOSED WELL.

600'

HARCROW SURVEYING, LLC

2314 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 513-2570 FAX: (575) 746-2158 chad harcrow77@yahoo.com





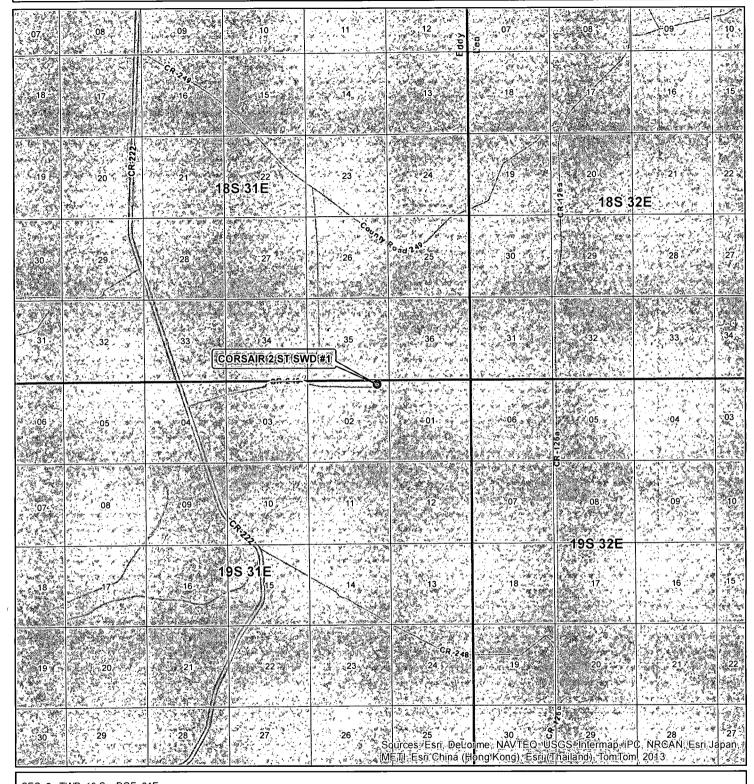
COG OPERATING, LLC

CORSAIR 2 STATE SWD #1 WELL
LOCATED 250 FEET FROM THE NORTH LINE
AND 800 FEET FROM THE EAST LINE OF SECTION 2,
TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY. NEW MEXICO

EDDY CO	UNTY, NEW	MEXICO		
SURVEY DATE: 09/	05/2013	PAGE:	1 OF	1
DRAFTING DATE: 09/	/09/2013			

APPROVED BY: CH DRAWN BY: TL FILE: 13-599

VICINITY MAP



SEC. 2, TWP. 19 S, RGE. 31E

SURVEY: N.M.P.M

COUNTY: EDDY STATE: NEW MEXICO DESCRIPTION: CORSAIR 2 ST SWD #1

250' FNL, 800' FEL

ELEVATION: 3632.7

OPERATOR: COG OPERATING LLC LEASE: CORSAIR 2 ST SWD

W.O. # 13-599

1 IN = 6,000 FT

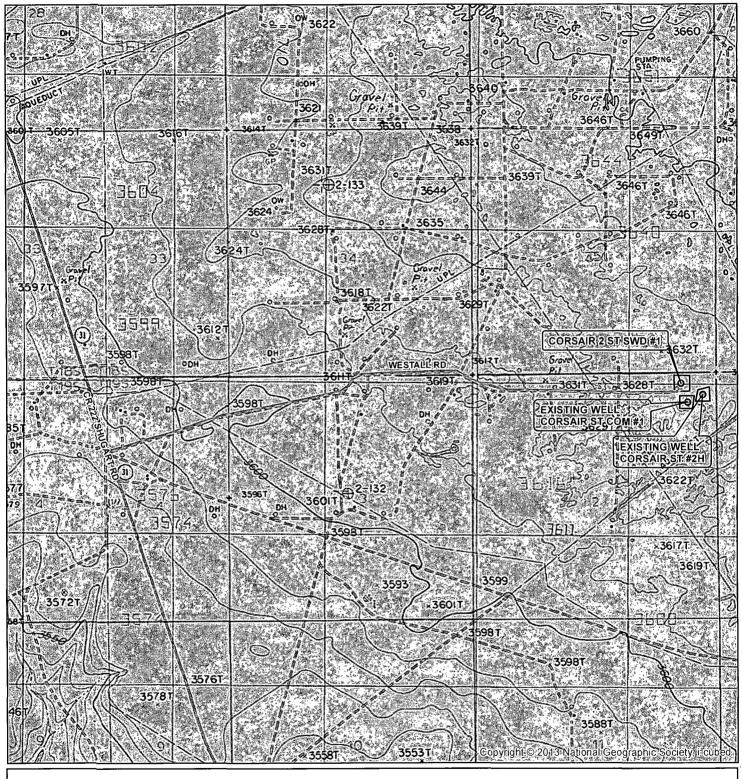
WELL
TOWNSHIP
SECTION

HARCROW SURVEYING, LLC 1107 WATSON, ARTESIA N.M. 88210 PH: (575) 513-2570 FAX: (575) 746-2158 chad_harcrow77@yahoo.com



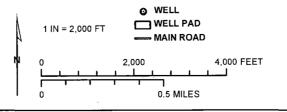
MAP DATE: 9/6/2013

LOCATION VERIFICATION MAP



SEC. 2, TWP. 19 \$, RGE. 31E SURVEY: N.M.P.M COUNTY: EDDY STATE: NEW MEXICO DESCRIPTION: CORSAIR 2 ST SWD #1 250' FNL, 800' FEL ELEVATION: 3632.7 OPERATOR: COG OPERATING LLC LEASE: CORSAIR 2 ST SWD

W.O. # 13-599

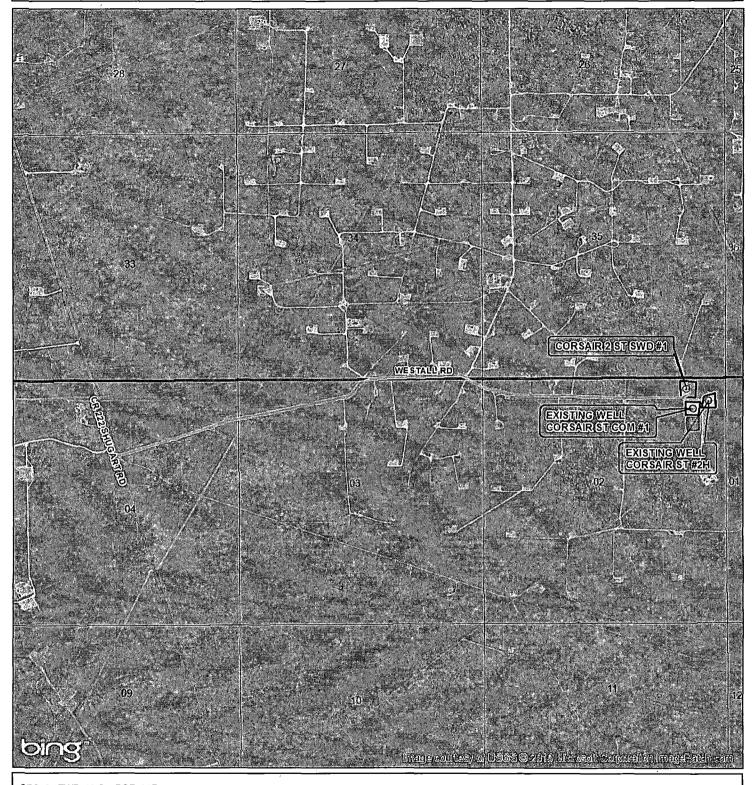


HARCROW SURVEYING, LLC 1107 WATSON, ARTESIA N.M. 88210 PH: (575) 513-2570 FAX: (575) 746-2158 chad_harcrow77@yahoo.com



MAP DATE: 9/6/2013

LOCATION VERIFICATION MAP



SEC. 2, TWP. 19 S, RGE. 31E

SURVEY: N.M.P.M

COUNTY: EDDY STATE: NEW MEXICO DESCRIPTION: CORSAIR 2 ST SWD #1

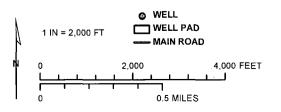
250' FNL, 800' FEL-

ELEVATION: 3632.7

OPERATOR: COG OPERATING LLC

LEASE: CORSAIR 2 ST SWD

W.O. # 13-599



HARCROW SURVEYING, LLC 1107 WATSON, ARTESIA N.M. 88210 PH: (575) 513-2570 FAX: (575) 746-2158 chad_harcrow77@yahoo.com



MAP DATE: 9/6/2013

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

John Bemis Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Balley
Division Director
Oil Conservation Division



Administrative Order SWD-1400 February 22, 2013

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of 19.15.26.8B NMAC, COG Operating LLC, seeks an administrative order to utilize its proposed Corsair-2 State SWD Well No. 12 (API 30-015-NA) to be located 250 feet from the North line and 800 feet from the East line, Unit letter A of Section 2, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, COG Operating LLC, is hereby authorized to utilize its proposed Corsair 2 State SWD Well No. 1 (API 30-015-NA) to be located 250 feet from the North line and 800 feet from the East line, Unit letter A of Section 2, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico, for disposal of oil field produced water (UIC Class II only) into the Devonian, Silurian, and Ordovician through an open hole interval from approximately 12900 feet to 14350 feet through internally coated tubing and a packer set within 100 feet of the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

Administrative Order SWD-1400 COG Operating LLC February 22, 2013 Page 2 of 3

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2580 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Administrative Order SWD-1400 COG Operating LLC February 22, 2013 Page 3 of 3

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

JAMI BAILEY

Director

JB/wvjj

cc: Oil Conservation Division – Artesia District Office

State Land Office – Oil, Gas, and Minerals Division

Permit Conditions of Approval

API:

30-0/5-4/805

OCD Reviewer	Condition
CSHAPARD	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