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

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

NO CHANGE

State of New Mexico

Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

Revised December 16, 2011 RECEIVED DEC 2 0 2012 NMOCD ARTESIA

Form C-101

Permit

AP	PLICA	TION F	OR	PERMI	T TO	DRILL, RE	-ENTER	, DEEP	EN,	PLUGBA	CK, OR	ADD A ZONE		
			1 Ope	rator Name a	ınd Addr	ess			\bot		OGRID Num			
		C	layton	Williams esta Drive, idland, TX	Energy	y, Inc.					25706)		
		9	Six De	sta Drive,	Suite 3	3000					³ API Numbe	Г		
			M	idiand, 1 X	19/03)				3	0-015-330	97		
* Prope	erty Code					³ Property N	ame					Vell No		
	25235					STATE "2	:0B"					015		
						⁷ Surfac	e Location	n						
UL - Lot	Section	Township		Range	Lot	Idn Feet fro	om N/	'S Line	F	eet From	E/W Line	County		
Н	20	17S		29E		165	0 NO	ORTH		480	EAST	EDDY		
						⁸ Pool In	formatio	n						
GRAYBI	URG JAC	CKSON-S	R-Q-C	G-SA								28509		
					A	Additional W								
i	k Type sback		10	Well Type Oil		¹¹ Cable/Ro Rotar					13 Gr	ound Level Elevation 3607' GL		
¹⁴ M	ultiple		15 Pro	posed Depth		16 Format	ion		17 Cont		ļ	18 Spud Date		
			379	0' PBTD		San And	dres	Il Service	U	oon Approval				
Depth to Grou	ınd water			Dista	nce from	nearest fresh water	well			Distance to	nearest surface	water		
				19	Prop	osed Casing	and Cem	ent Pro	grar	n				
Туре	Hole	Size	Casii	ng Size	Ca	sing Weight/ft	Setting	Depth		Sacks of Cen	nent	Estimated TOC		
Surface	12	1/4"	8.4	5/8"		24#	43	439'				Surface		
Productio	n -7.7	7/8"	5	1/2"		17#	43	12'	\perp	950 sx	-	Surface		
									_		-			
									+					

Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Manual 3000 3000 Senital 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 the drilling pit will be constructed according to NMOCD guidelines ___, a general permit ___, or an (attached) alternative Approved By: OCD-approved plan X Signature: Debbie McKelvey Printed name: Title: Approved Date Title: Agent **Expiration Date:** debmckelvey@earthlink.net E-mail Address: Date: 12/19/12 Phone: 575-392-3575 Conditions of Approval Attached

Casing/Cement Program: Additional Comments

| <u>District.11</u> | 16.25 N. French Dr., Hobbs, NM 88240 |
| Phome: (575) 393-6161 | Fas: (575) 393-0720 |
| Ottobert.10 |
| St.1 S. First St., Artesia, NM 88210 |
| Phome: (575) 748-1283 | Fas: (575) 748-9720 |
| <u>District.111</u> |
| 1000 Rio Brazios Road, Aztec, NM 87410 |
| Phome: (505) 334-6178 | Fas: (505) 334-6170 |
| <u>District.125</u> |
| 1220 S. St., Francis Dr., Santa Fe, NM 87505

Phone, (505) 476-3460 Fax: (505) 476-3462

4 Property Code

25235

API Number

30-015-33097

State of New Mexico Energy, Minerals & Natural 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 Number

015

3 Pool Name

GRAYBURG JAÇKSON-7R'S, QN, GB, SA

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١	∕∨	г. і	.,1	2 -1	А	"	L. F.	١ ١		w		1	1	IN	1.	, ,	• •	١.	. 15	١r	٠,	4	١	T.	1.	"	". I	,	ıι		4	1	11	, ,	' '	vi	ľ	1.7	۸.	1

Property Name STATE 20 B

² Pool Code

28509

⁷ OGRID 25076)	•		C1.	⁸ Operator N AYTON WILLIAMS				Elevation 3607
		···········	·····	······································	¹⁰ Surface L	ocation			J
UL, or lot no. H	Section 20	Township 178	Range 29E	Lot Idn	Feet from the 1650	North/South line NORTH	Feet from the 480'	East/West line EAST	County EDDY
*14	T 6	10			γ	Different From	······································	· (0)	
14), or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Éast/West line	County
⁽² Dedicated Acre 40	S Joint o	r Infill	Consolidation	Code 15 O	rder No.				
No allowable livision.	will be as:	signed to t	his complet	ion until a	II interests have t	peen consolidated o	r a non-standare	d unit has been ap	pproved by the
						0- 48	Thereby certify to the best of my owns a working the proposed be location pursue interest, or to a order heretofur		al herem is und comple lan this organization cultar interest in the lassl includio ight to dell this well at this er of such a mineral or work
,							I hereby cer plat was plo made by mo same is true 10/21/2003 Date of Surve	EYOR CERT rify that the well loce offed from field notes or under my superve and correct to the b ey (Seal of Professional San	nion shown on this of actual surveys ision, and that the est of my belief.
		And the state of t					03.11.1142 Certificate Nu	mber	reprint, Million or p. a. 1 (g.) i Million or p. (g.) profession o

Recompletion Procedure State 20 B#15

<u>Purpose:</u> Abandon Yeso completion by setting a CIBP and dumping cement on top. The San Andres interval will then be perforated, acidized and frac'ed and the interval tested. The frac will require four frac tanks each filled with 480 bb/s of fresh water.

- 1.) MI RU PU. POOH with rods and pump. Install BOP, release TAC and POOH with 2-7/8" tubing.
- 2.) PU 4-3/4" bit and 5-1/2" csg scraper and RIH to 3850'. POOH.
- 3.) PU 5-1/2" treating packer and CIBP on 2-7/8" tubing and RIH. Set CIBP at 3810 (collars at 3776' & 3821'). Load wellbore with fresh water (capacity about 80 bbls), set treating packer and pressure test CIBP to 3000#. Tie onto backside and test casing and BOP to 3000#. Release packer and POOH.
- 4.) RU wireline company. RIH with GR-CCL and 3-1/8" select fire perforating gun and RIH. Get on depth with Halliburton's Dual Spaced Neutron Log dated 12/04/03. Perforate the San Andres interval with 29 holes, premium charges, as follows:

3378', 82', 87', 92', 94', 3481', 3515', 18', 24', 28', 32', 46', 50', 54', 92', 96', 3600', 05', 09', 33', 47', 53', 75', 80', 86', 92', 3702', 07' & 12'.

Dump bail 26' of cement (2.61ft³, about 3 sx) on top of plug.

- 5.) PU 5-1/2" treating packer on 2-7/8" tubing and RIH, testing tubing. RIH to 3712' and break circulation with fresh water. Once circulation is established, pump 500 G 15% NEFe acid for spot and flush it with 18.2 bbls fresh water. This will result in a balanced acid spot.
- 6.) PUH with tubing and set packer at 3300' (collars at 3285' & 3329').
- 7.) Acidize the San Andres with 3500 G 15% NEFe and 60 ball sealers. Break the formation with water and then start on acid. Attempt to acidize well at 5-6 bpm, maximum treating pressure is 4000#. Pump 750 G and drop 6 BS and then pump 200 G acid and drop 4 BS for the remaining 14 stages of the job. Flush tubing with 21 bbls of fresh water (to top perf).
- 8.) Release packer and RIH to 3725' to knock balls from perforations and POOH.
- 9.) Prepare well to frac down casing per the attached procedure. Flush frac to top perf, 78.4 bbls. Record ISIP and 5,10,15 minute pressures and SION.



Recompletion Procedure State 20 B#15

9.) Check well for fill and if necessary, clean well out to PBTD near 3790'. RIH with production equipment and test well.

GMH 12/11/12

Wellbore Information State 20B #15

Date: 11/5/12

PBTD: 4,250'

TD: 4,312'

API: 30-015-33097

GL: 3607'

KB: 3620' (13' kb)

Field: Empire, East (Yeso)

Pool: 96610

Prop Code: 25235

OGRID: 25706

State Lease

Location:

1650' FNL, 480' FEL, SEC. 20 'H', T-17-S, R-29-E, EDDY

COUNTY, NM

CASING:

8-5/8", 24#, J-55, ST&C @ 435' w/ 400 sx. CIRC.

5-1/2", 17#, J-55, LT&C @ 4312', DV @ 2565'. 1st stg 420 sx, 2nd

stg 530 sx, DNC. TOC by TS at 453'.

TUBING:

120 Jts 2-7/8", 6.4#, J-55, 8 rd, EUE Tbg @ 3862'

1 2-7/8" x 5-1/2" TAC @ 3866'

10 Jts 2-7/8", 6.4#, J-55, 8 rd, EUE Tbg @ 4188'

1 Seating Nipple @ 4189'

1 4' Perf Sub @ 4193'

1 BP Mud Anchor @ 4226'

RODS & PUMP:

1 1-1/2" x 26' PR w/ 1-3/4" x 22' PRL

4 1' Rod Subs (8',6',4',2')

55 1" x 25' CDI K Rods

57 7/8" x 25' CDI K Rods

44 3/4" x 25' CDI K Rods

8 1-1/2" Weight Bars

1 2-1/2" x 2" x 16' Pump (10/18/07)

Wellbore Information State 20B #15

PERFORATIONS:

Yeso: OA: 1 spf, 38 holes: 3855'-4169'.

3855', 67', 78', 82', 91', 3905'; 07', 14', 17', 21', 55', 64', 68', 77', 85', 90', 95', 4000', 05', 10', 15', 23', 28', 33', 48', 54', 59', 77', 82', 90', 4100', 13', 25', 30', 35', 53', 64' & 69'.

HISTORY:

11/17/03: CWEI spuds 11" hole.

11/24/03: TD 7-7/8" hole at 4312'. Run fluid caliper, case and

cement well, DNC. TOC by TS at 1906'.

11/26/03: Run second temperature survey, TOC by TS at 453'.

12/2/03: PU 2-7/8" WS, DO DV tool at 2616', tag PBTD at

4263'. Circ well clean w/ FW, test csg to 3000#, OK. RU WL, tag PBTD at 4250'. Perf Yeso 3855'-4169'. PU PPI tool and break down and acidize each perf w/ 2 bbls acid. Frac well dn csg w/ hot acid, total acid 41 kG, 54.8 kG gel and 5400# 100 mesh sand. AIR 25.1

bpm at 1211#, max TP 1426#, ISIP 847#, 15-802#.

Flow well back, POP.

12/17/03: IP: 98 bopd, 440 bwpd, 166 mcfd.

8/31/12: Yeso cumulative production 38 mbo, 185 mmcf, 125

mbw.

Wellbore Schematic (From Surface to TD)

Printed:

12/21/2012

State 20 B # 15 Well ID: 81175-015 API # 30-015-33097 Proposed-WBS-1650 FNL and 480 FEL 'GL Elev: 3,607.00 0 Fill Depth: Sec, Blk, Sur(Lbr, Lge, Sur)or(Sec, Twn, Rng): 20H, T17S, R29E, County, State: Eddy, NM PBTD: 4.250.00 Aux ID: TD: 4,312.00 KB = 13; DF = ; All Depths Corr To: KB BOP: Hole-Size Date Drilled Top At Btm At Diameter 12.0000 0.00 435.00 11/17/2003 7.8750 435.00 4,312.00 11/24/2003 Surface Casing Date Ran: 11/17/2003 1,000 Weight Grade Btm At Description Diameter Length Top At 13 8.6250 24.00 J55 422.00 13.00 435.00 Casing **Production Casing String 1** Date Ran: 11/24/2003 Weight Btm At # Diameter Grade Length Top At Description Casing 71 5.5000 17.00 J55 2,610.85 13.00 2,623.85 2,623.85 D·V Tool 1 5.5000 2.10 2,625.95 Casing 37 17.00 2,625.95 4,264.90 5.5000 J55 1,638.95 5.5000 4,264.90 4,266.20 Float Collar 1 1.30 Casing 5.5000 17.00 J55 44.70 4,266.20 4,310.90 1 Float Shoe 5.5000 1.10 4,310.90 4,312.00 2,000 Cement TOC Per Weight #Sx Class I D OD Top At Btm At 8.625 12.000 0.00 435.00 Circ 400 950 5.500 7.875 453.00 4,312.00 TS Zone and Perfs Glorieta-Yeso, East Perforations Status #/Ft Ttl# Top Bottom Formation Opened Closed 3,855.00 YESO 12/5/2003 3,855.00 Α 3,867.00 YESO A 12/5/2003 1 1 3,867.00 3,878.00 3,878.00 YESO Α 12/5/2003 1 3,000 3,882.00 YESO 12/5/2003 1 3,882.00 Α A 12/5/2003 1 3,891.00 YESO 3,891.00 3,905.00 YESO A 12/5/2003 1 3,905.00 3,907.00 YESO A 12/5/2003 1 1 3,907.00 3,914.00 3,914.00 YESO Α 12/5/2003 1 1 3,917.00 3,917.00 YESO Α 12/5/2003 1 proposed peats 1 3.921.00 3.921.00 YESO Α 12/5/2003 1 5378 - 3612 1 1 3.955.00 3.955.00 YESO Α 12/5/2003 3,964.00 YESO 12/5/2003 1 1 3,964.00 Α 3,968.00 3,968.00 YESO A 12/5/2003 1 1 3,977.00 3,977.00 YESO A 12/5/2003 1 1 4,000 3,985.00 3,985.00 YESO A 12/5/2003 1 1 1 3,990.00 3,990.00 YESO A 12/5/2003 1 1 3,995.00 3,995.00 YESO Α 12/5/2003 1 1 12/5/2003 4,000.00 4,000.00 YESO Α 1 1 4,005.00 4,005.00 YESO Α 12/5/2003 1 1 1 4,010.00 4,010.00 YESO Α 12/5/2003 4,015.00 4,015.00 YESO Α 12/5/2003 1 1 4,023.00 4,023.00 YESO Α 12/5/2003 1 4,028.00 4,028.00 YESO Ā 12/5/2003 1 4,033.00 4,033.00 YESO 12/5/2003 1 Α 4,048.00 4,048.00 YESO Ā 12/5/2003 1 1 4,054.00 4,054.00 YESO 12/5/2003 1 1 Α 5.000 -4,059.00 4,059.00 YESO 12/5/2003

Wellbore Schematic (From Surface to TD)

Printed: 12/21/2012

State 20 B # 15

Well ID: 81175-015

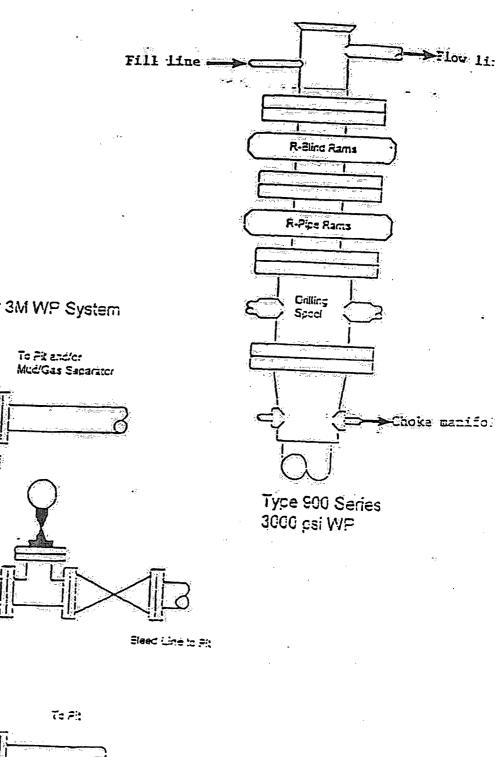
API # 30-015-33097

Тор	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl#
4,077.00	4,077.00	YESO ;	Α	12/5/2003		1	1
4,082.00	4,082.00	YESO	Α	12/5/2003	•	1	1
4,090.00	4,090.00	YESO	Α	12/5/2003		1	1
4,100.00	4,100.00	YESO	Α	12/5/2003		1	1
4,113.00	4,113.00	YESO	А	12/5/2003		1	1
4,125.00	4,125.00	YESO	Α .	12/5/2003		1	1
4,130.00	4,130.00	YESO :	A	12/5/2003		1	1
4,135.00	4,135.00	YESO .	Α	12/5/2003		1.	1
4,153.00	4,153.00	YESO .	Α	12/5/2003		1	. 1
4,164.00	4,164.00	YESO	Α.	12/5/2003		1:	1
4,169.00	. 4,169.00	YESO	: A	12/5/2003		1	1

Tubing String 1						Date Ran:	12/8/2003
Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Tbg Sect 1	120	2.8750	6.40	J55	3,862.00	13.00	3,875.00
Tbg Anchor	1	2.8750			2.78	3,875.00	3,877.78
Tbg Sect 2	10	2.8750	6.40	1 55	323.22	. 3,877.78	4,201.00
Stg Nipple	1	2.8750			1.10	4,201.00	4,202.10
Prf Nipple	. 1	2.8750			4.00	4,202.10	4,206.10
Mud Anchor	1	2.8750			31.80	4,206.10	
Bull Plug	1	2.8750	'		0.50	4,237.90	4,238.48

Rod String 1						Date Ran:	10/18/2007
Deseription	#	Diameter	Rod Box	Grade	Length	Top At	Btm At
Pol Rd	1	1.5000	i.		26.00	0.00	26.00
Pol Rd Lnr	1	1.7500			22.00	4.00	26.00
Rod Sect 1	4	1.0000			20.00	26.00	46.00
Rod Sect 2	55	1.0000	:	ĸ	1.375.00	46.00	1,421.00
Rod Sect 3	57	0.8750	:	K	1,425.00		
Rod Sect 4	45	0.7500		K	1,125.00	2,846.00	3,971.00
Rod Sect 5	8	1.5000			200.00	3,971.00	4,174.00
Pump .	1	2.0000			16.00	4,171.00	4,187.00

BLOWOUT PREVENTER SYSTEM



Choke Manifold Assembly for 3M WP System

Adjustible Cheke

Adjustible Cheke

Adjustible Cheke

Sleed Line to Pix

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CLAYTON WILLIAMS ENERGY, INC. SAN ANDRES RECOMPLETION H2S RECAUTIONS STATE 20B #15 API 30-015-33097

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide (H_2S) .
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

- 1. Well Control Equipment:
 - A. A 5000 psig WP Blowout preventer with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit will be furnished.
- 2. H₂S detection and monitoring equipment:
 - A. 2 portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

3. Visual warning systems:

A. A wind direction indicator will be in place on the pulling unit doghouse.

4. Mud program:

A. The working fluid for this recompletion will be 2% KCL treated fresh water.

5. Metallurgy:

- A. Tubing, wellhead, and blowout preventers shall be suitable for H₂S service.
- B. All elastomers used for packing and seals shall be H₂S trim.

6. Communication:

A. Communications in company vehicles are provided by cellular telephones.

Cell1: 575-390-9063

Cell2: 575-390-9065

- B. Land line (telephone) communications at Hobbs office. Phone: 575-392-6950
- C: Emergency Numbers

911

Carlsbad Sheriff's Dept.: 575-887-1888 Carlsbad Hospital: 575-887-4100 Carlsbad Fire Dept.: 575-885-3125 Maljamar Fire Dept.: 575-676-4100 Hobbs Hospital: 575-492-5000

New Mexico State Police: 575-392-5588

8. Well testing:

A. No drill stem tests are being contemplated during this operation.