

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
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 & 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 LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025- 43406		2 Pool Code 44500		3 Pool Name Maljamar; Yeso, West					
4 Property Code 314751		5 Property Name IVAR THE BONELESS FEDERAL				6 Well Number 21H			
7 OGRID NO. 229137		8 Operator Name COG OPERATING, LLC				9 Elevation 4014'			
10 Surface Location									
UL or lot no. D	Section 22	Township 17S	Range 32E	Lot Idn	Feet from the 105	North/South line NORTH	Feet From the 613	East/West line WEST	County LEA
11 Bottom Hole Location If Different From Surface									
UL or lot no. D	Section 15	Township 17S	Range 32E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 330	East/West line WEST	County LEA
12 Dedicated Acres 160		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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

	<p>GEODETIC DATA NAD 83 GRID - NM EAST N: 665097.1 - E: 717190.1 LAT: 32.82706968' N LONG: 103.76085042' W</p> <p>SURFACE LOCATION N: 665097.1 - E: 717190.1 LAT: 32.82706968' N LONG: 103.76085042' W</p> <p>BOTTOM HOLE N: 670151.6 - E: 716876.6 LAT: 32.84096723' N LONG: 103.76178212' W</p> <p>CORNER DATA NAD 83 GRID - NM EAST A: FOUND 1/2" REBAR N: 659922.9 - E: 716609.8 B: FOUND 2" PIPE N: 662560.9 - E: 716592.7 C: FOUND 1" NAIL N: 665199.7 - E: 716576.6 D: FOUND 2" PIPE N: 667841.6 - E: 716560.2 E: FOUND BRASS CAP "1913" N: 670479.9 - E: 716544.7 F: FOUND BRASS CAP "1913" N: 670494.5 - E: 719183.8 G: FOUND BRASS CAP "1913" N: 670497.8 - E: 721816.9 H: FOUND BRASS CAP "1913" N: 667859.2 - E: 721833.3 I: FOUND BRASS CAP "1913" N: 665220.0 - E: 721849.6 J: FOUND 1/2" REBAR N: 662580.5 - E: 721865.6 K: FOUND BRASS CAP "1913" N: 659940.4 - E: 721879.8 L: FOUND BRASS CAP "1913" N: 665210.0 - E: 719207.2</p>	<p>17 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.</p> <p>Signature: <u>Robyn M. Russell</u> Date: <u>7/20/16</u> Printed Name: <u>Robyn M. Russell</u> E-mail Address: <u>Russell@concho.com</u></p>
	<p>18 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.</p> <p>6-1-2016 Date of Survey</p> <p>Signature and Seal of Professional Surveyor: <u>Robert M. Howett</u> 19680 Certificate Number</p>	

COG Operating LLC
Ivar the Boneless Federal #21H

Prod. Single Stage	625	12.5	2.01	11.4	22	Lead: 35:65:6 C:Poz Gel w/5% salt + 5 pps LCM + 0.2% SMS + 1% FL-25 + 1% Ba-58+0.3% FL-52A + 0.125 pps CF
	1000	14	1.37	6.4	10	Tail: 50:50:2 C:Pox Gel w/5% salt+3 pps LCM + 0.6% SMS + 1% FL-25 +1% BA-58+ 0.125 pps CF
IF DV/ECP Tool +/- 3982'						
Prod Multi-Stage	400	12.5	2.01	11.4	22	2 nd Stage Lead: 35:65:6 C:Poz Gel w/5% salt+5 pps LCM+0.2% SMS + 1% FL-25+1% BA-58+0.3% FL-52A+ 0.125 pps CF
	150	16.8	.99	4.8	6	2 nd Stage Tail: Class"C" w/0.3% R-3 + 1.5% CD-32
	200	12.5	2.01	11.4	22	1 st stage Lead: 35:65:6 C: PozGel w/5% salt + 5 pps LCM + 0.2% SMS + 1% FL-25+ 1% BA-58 + 0.3% FL-52A + 0.125 pps CF
	1000	14	1.37	6.4	10	1 st stage Tail: 50:50:2 C: PozGel w/5% salt + 3 pps LCM + 0.6% SMS + 1% FL-25 + 1% BA-58 + 0.125 pps CF

Casing String	TOC	% Excess
Surface	0'	50%
Intermediate	0'	50%
Production	0'	35%

4. Pressure Control Equipment * See attachment for further details*****

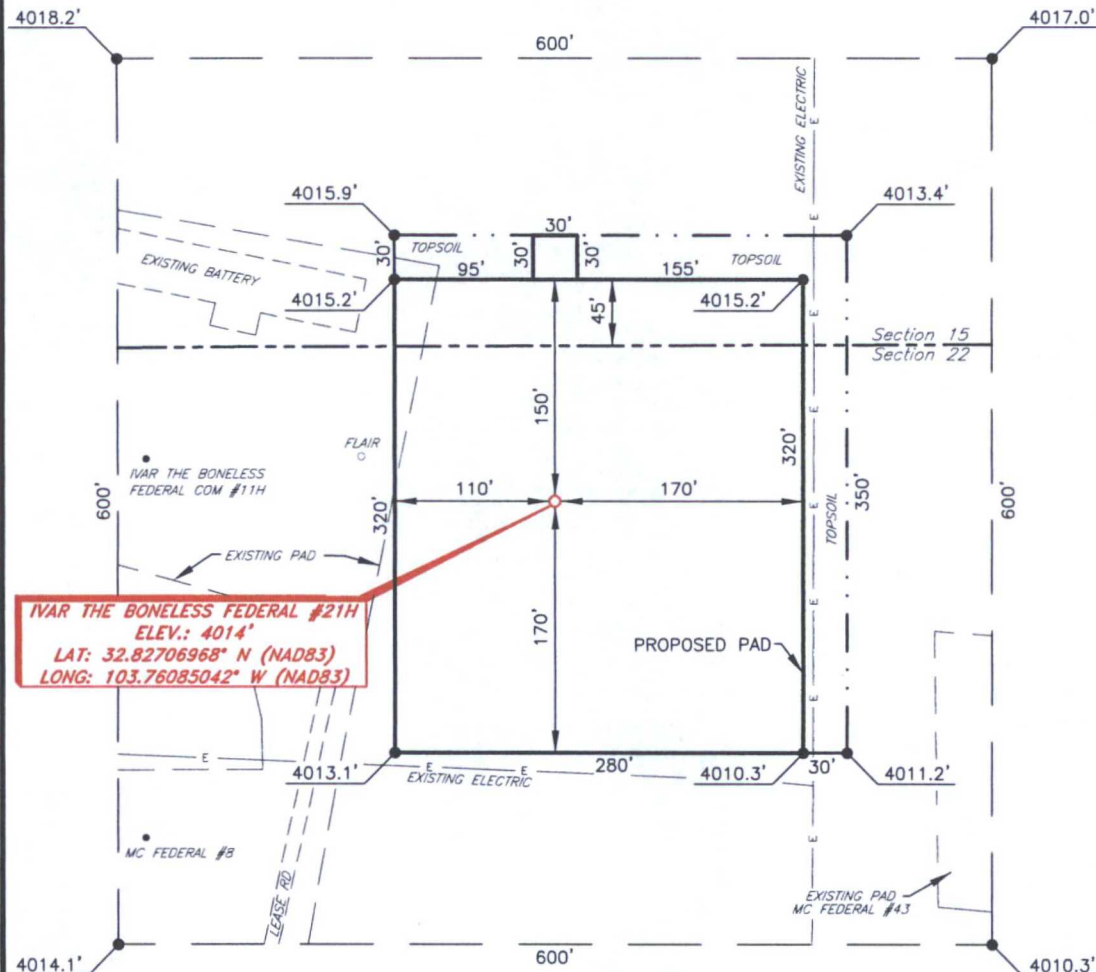
See COA

No	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
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OP installed and tested before drilling which hole?	Size?	Min Required WP	Type	✓	Tested to:
12-1/4"	13-5/8"	2M	Annular	X	2000 psi
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4" & 7 7/8"	13-5/8"	2M	Annular	X	2000 psi
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

COG OPERATING, LLC
 IVAR THE BONELESS FEDERAL #21H
 (105' FNL & 613' FWL)
 SECTION 22, T17S, R32E
 N. M. P. M., LEA CO., NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of CR-126 (Conoco Rd.) and CR-126A (Maljamar Rd.)
 Go North on CR-126A approx. 0.6 miles to a lease road on the right;

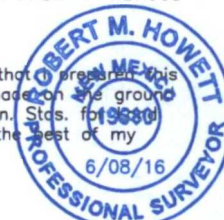
Turn right and go East approx. 260 feet to the MC Fed #8 (existing);

Location is approx. 273 feet Northeast of the existing well.

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES
 ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA IS SHOWN FROM A PREVIOUS
 SURVEY REFERENCED HEREON.

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this
 unclassified survey of a well location from an actual survey made on the ground
 under my direct supervision, said survey and plat meet the Min. Stas. for 1988
 Surveying in the State of N. M. and are true and correct to the best of my
 knowledge and belief.

Robert M. Howett
 Robert M. Howett NM PS 19680



SCALE: 1" = 100'

BEARINGS ARE
 NAD 27 GRID - NM EAST
 DISTANCES ARE
 GROUND.

Firm No.: TX 10193838 NM 4655451

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NO.	REVISION	DATE
JOB NO.:	LS140544R2	
DWG. NO.:	140544R2PA0	

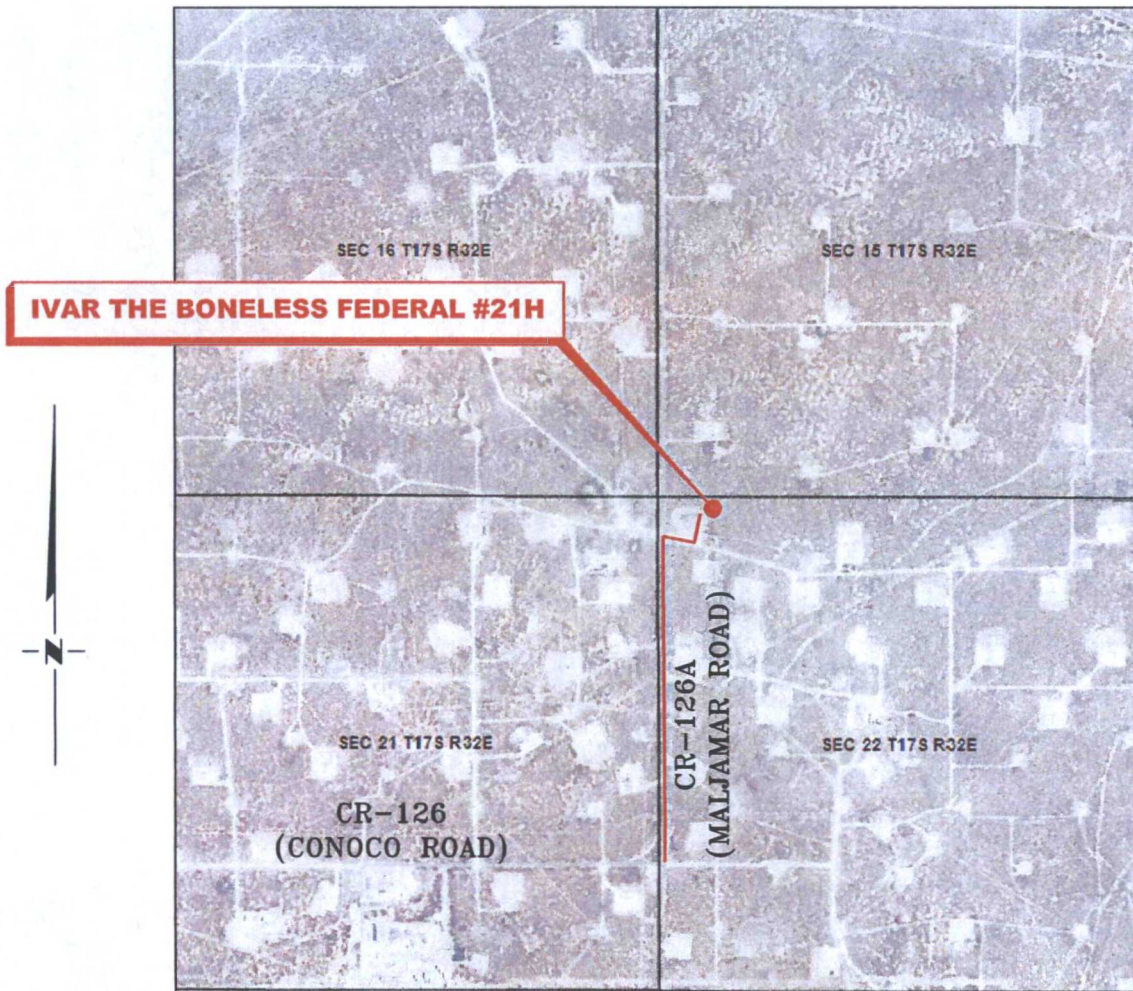
RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 6-1-2016
SURVEYED BY: BK
DRAWN BY: JR
APPROVED BY: RMH
SHEET : 1 OF 1

VICINITY MAP

NOT TO SCALE



*SECTION 22, TWP. 17 SOUTH, RGE. 32 EAST,
N. M. P. M., LEA CO., NEW MEXICO*

OPERATOR: COG Operating, LLC
LEASE: Ivar the Boneless Federal
WELL NO.: 21H

LOCATION: 105' FNL & 613' FWL
ELEVATION: 4014'

Firm No.: TX 10193838 NM 4655451

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NO.	REVISION	DATE
JOB NO.: LS140544R2		
DWG. NO.: 140544R2VM		

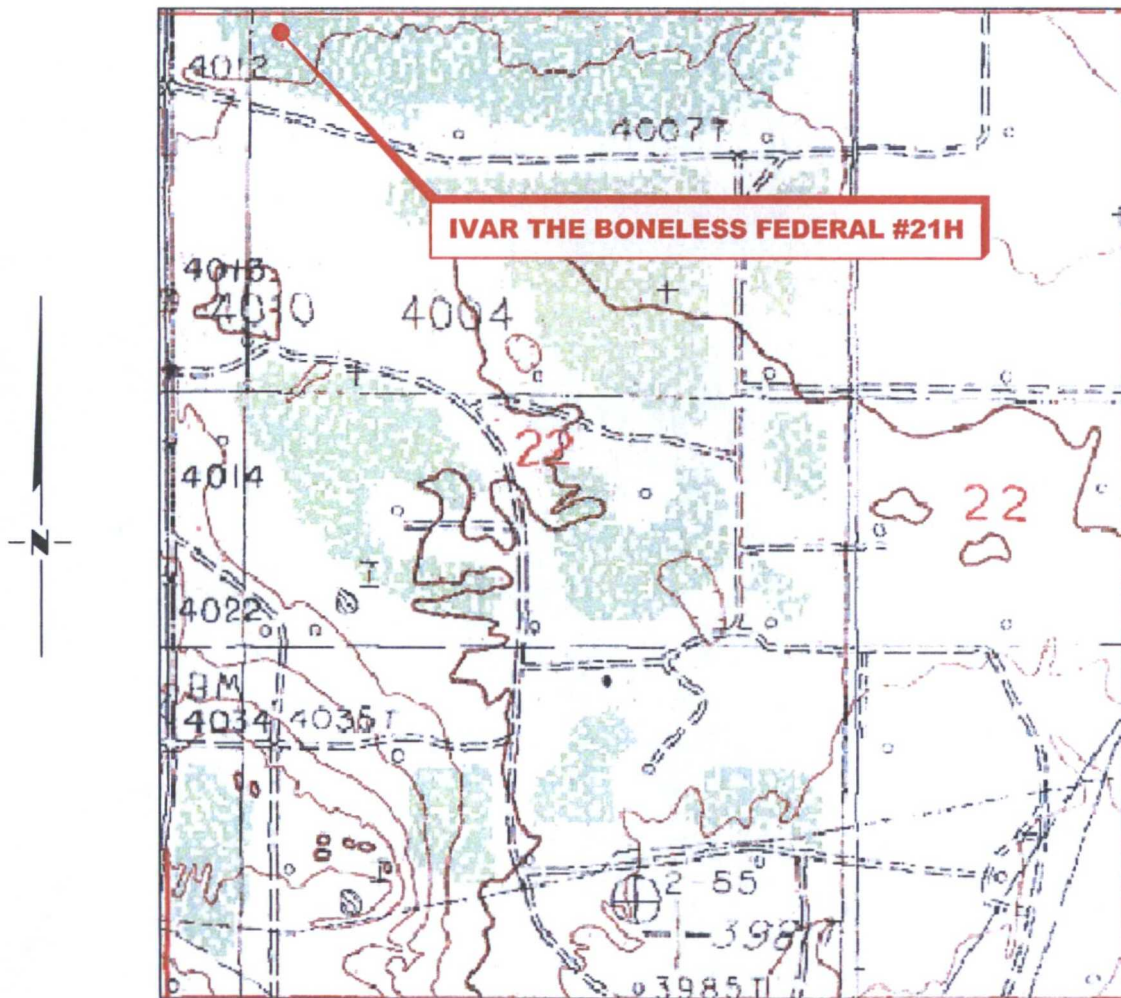
RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: NTS
DATE: 6-1-2016
SURVEYED BY: BK
DRAWN BY: JR
APPROVED BY: RMH
SHEET : 1 OF 1

LOCATION VERIFICATION MAP

NOT TO SCALE



*SECTION 22, TWP. 17 SOUTH, RGE. 32 EAST,
N. M. P. M., LEA CO., NEW MEXICO*

OPERATOR: COG Operating, LLC
LEASE: Ivar the Boneless Federal
WELL NO.: 21H
ELEVATION: 4014'

LOCATION: 105' FNL & 613' FWL
CONTOUR INTERVAL:
USGS TOPO. SOURCE MAP:
Maljamar (P. E. 1985)

Firm No.: TX 10193838 NM 4655451

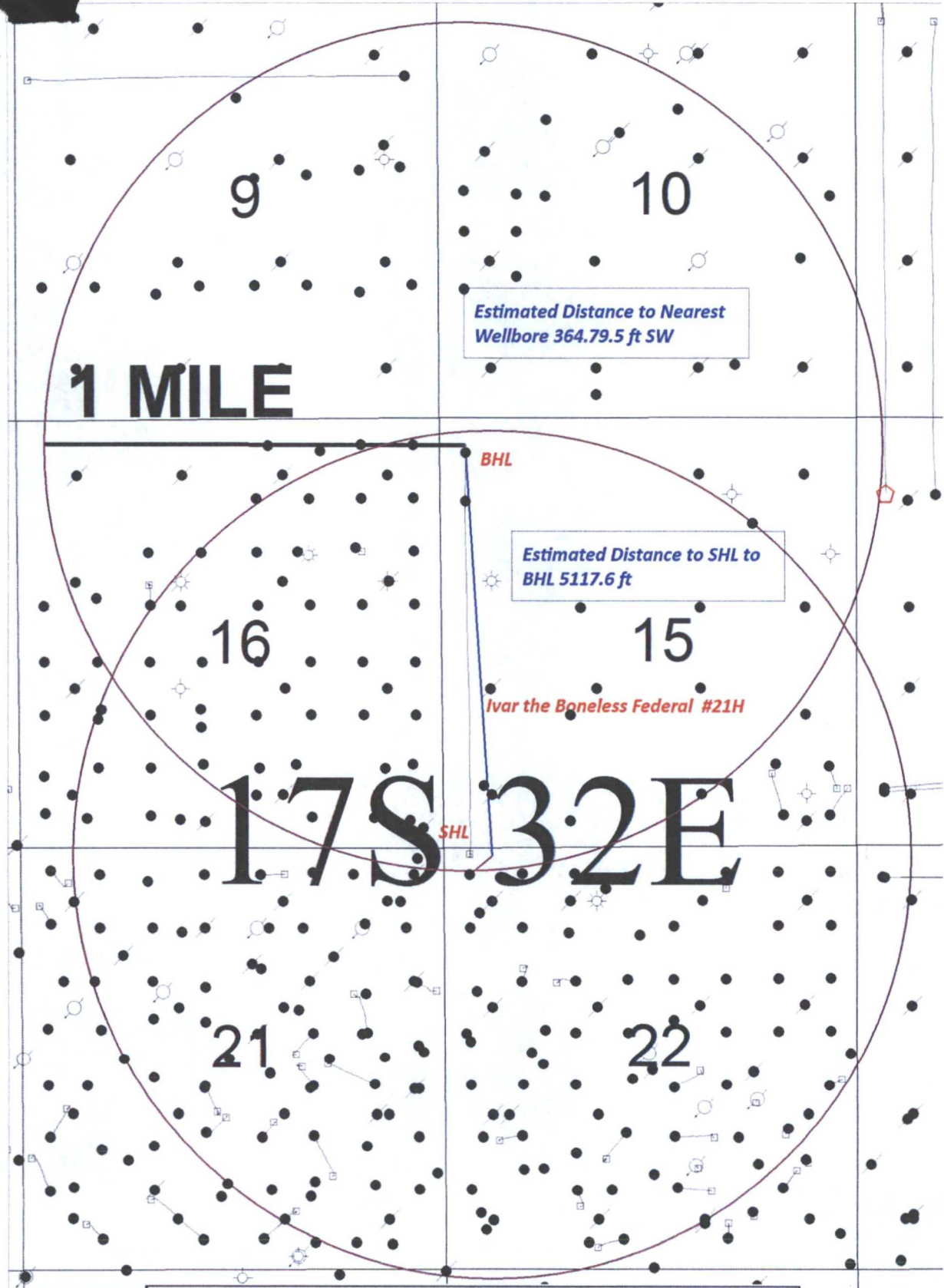
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NO.	REVISION	DATE
JOB NO.:	LS140544R2	
DWG. NO.:	140544R2VM	

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: NTS
DATE: 6-1-2016
SURVEYED BY: BK
DRAWN BY: JR
APPROVED BY: RMH
SHEET : 1 OF 1



SENM SHELF AREA

Ivar the Boneless Federal #21H

Sec. 22, T17S-R32E SHL 105 FNL 613 FWL, Unit D
 Sec. 15, T17S-R32E SHL 330 FNL 330 FWL, Unit D

Author:
L. Marley

All Wells

Date:
10 June, 2016

Scale:

Lm_RA_1mileRadius_map.
gmp