

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**5. Lease Serial No.
NMNM114991.

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
GREEN WAVE 20 FED 8V 28H9. API Well No.
30-025-43208-00-X110. Field and Pool, or Exploratory
GWC-025 G06 S263407P11. County or Parish, and State
LEA COUNTY, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
DEVON ENERGY PRODUCTION COMPANYContact: REBECCA DEAL
E-Mail: REBECCA.DEAL@DVN.COM3a. Address
6488 SEVEN RIVERS HIGHWAY
ARTESIA, NM 882113b. Phone No. (include area code)
Ph: 405-228-8429

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 20 T26S R34E SENE 2630FNL 330FEL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Co., L.P. respectfully requests approval to change the approved oil well to a vertical science/monitoring well and change approved well name from Green Wave 20-17 Fed 28H to Green Wave 20 Fed 8V.

The completion entails Diagnostic Fracture Injection Tests (DFITs) and traced stimulations in order to help understand fracture geometries, reservoir properties, and improve future development planning. Depending on the number of tests conducted, rough completion testing time estimates range from several months to over one year for intermittent operations, monitoring, and data collection. After all formation testing has been completed, viability of commingling and/or isolating all tested intervals will be evaluated. After internal evaluation, Devon will sundry the well to propose to either produce the well, setup for long term pressure monitoring, evaluate further testing/re-completion, or to plug and abandon the wellbore.

NAME CHANGE

GREEN WAVE 20
FEDERAL #8
PROPERTY # 38988SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #352827 verified by the BLM Well Information System

For DEVON ENERGY PRODUCTION COMPANY LP, sent to the Hobbs

Committed to AFMSS for processing by DEBORAH MCKINNEY on 10/04/2016 (17DLM0006SE)

Name (Printed/Typed) REBECCA DEAL

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 09/28/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHARLES NIMMER

Title PETROLEUM ENGINEER

Date 10/17/2016

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Hobbs

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.

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM

Additional data for EC transaction #352827 that would not fit on the form

32. Additional remarks, continued

See attached Drilling Plan, and revised Directional Plan, C-102, & CTB diagram.

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 30-025-43208		² Pool Code 98210	³ Pool Name Stratagraphic
⁴ Property Code	⁵ Property Name GREEN WAVE 20 FED		⁶ Well Number 8V
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.		⁹ Elevation 3342.6

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	20	26 S	34 E		2630	NORTH	330	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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

<p>N89°23'17"E 2639.69 FT</p> <p>NW CORNER SEC. 20 LAT. = 32.0361972°N LONG. = 103.5004293°W NMSP EAST (FT) N = 377902.09 E = 799430.33</p>		<p>N89°53'26"E 2650.57 FT</p> <p>N/4 CORNER SEC. 20 LAT. = 32.0362184°N LONG. = 103.4919125°W NMSP EAST (FT) N = 377930.28 E = 802069.47</p>		<p>NE CORNER SEC. 20 LAT. = 32.0361753°N LONG. = 103.4833607°W NMSP EAST (FT) N = 377935.34 E = 804719.64</p>	
<p>GREEN WAVE 20 FED 8V ELEV. = 3342.6' LAT. = 32.0289524°N (NAD83) LONG. = 103.4844200°W NMSP EAST (FT) N = 375305.15 E = 804412.02</p>					
<p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.</p>					
<p>W/4 CORNER SEC. 20 LAT. = 32.0289377°N LONG. = 103.5004198°W NMSP EAST (FT) N = 375261.22 E = 799453.63</p>		<p>W/4 CORNER SEC. 20 LAT. = 32.0289285°N LONG. = 103.4833553°W NMSP EAST (FT) N = 375299.06 E = 804742.05</p>			
<p>SW CORNER SEC. 20 LAT. = 32.0216783°N LONG. = 103.5004145°W NMSP EAST (FT) N = 372620.35 E = 799475.65</p>		<p>S/4 CORNER SEC. 20 LAT. = 32.0216780°N LONG. = 103.4918672°W NMSP EAST (FT) N = 372640.77 E = 802124.71</p>		<p>SE CORNER SEC. 20 LAT. = 32.0216672°N LONG. = 103.4833470°W NMSP EAST (FT) N = 372657.52 E = 804765.39</p>	
S89°33'30"W 2649.54 FT		S89°38'12"W 2641.14 FT			

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.

Rebecca Deal 9/27/2016
Signature Date

Rebecca Deal, Regulatory Analyst
Printed Name

rebecca.deal@dvn.com
E-mail Address

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 knowledge and belief.

SEPTEMBER 1, 2016
Date of Survey

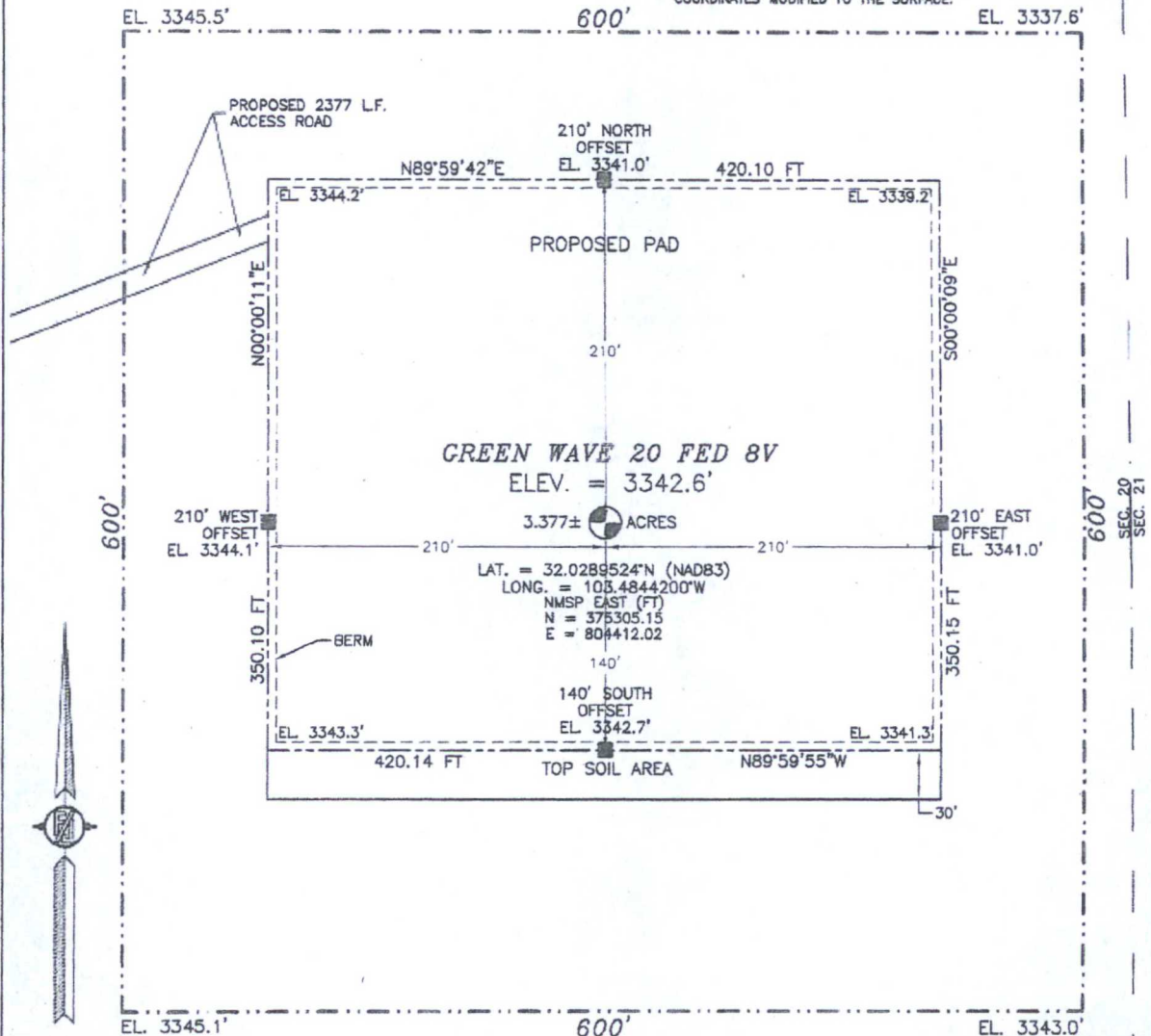
Mon F. Jaramillo
Signature and Seal of Professional Surveyor

12797
Certificate Number

MON F. JARAMILLO, PLS 12797
SURVEY NO. 3709A

SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HWY #128 AND COUNTY ROAD #2 (BATTLE AXE ROAD) GO SOUTH AND WEST ON BATTLE AXE ROAD APPROX. 12.2 MILES TO A LEASE ROAD ON LEFT (SOUTH) TURN SOUTH GO APPROX. 0.8 MILE ROAD TURNS LEFT (EAST) TURN EAST GO APPROX. 1.8 MILES TO A LEASE ROAD ON RIGHT (SOUTH) TURN SOUTH GO APPROX. 2.5 MILES TO AN EXISTING ROAD ON LEFT (EAST) GO EAST ON EXISTING ROAD APPROX. 0.7 MILE TO A FENCE GATE AND ROAD LATH. FOLLOW ROAD LATHS NORTHEAST APPROX. 0.4 MILE TO LOCATION

DEVON ENERGY PRODUCTION COMPANY, L.P.
GREEN WAVE 20 FED 8V

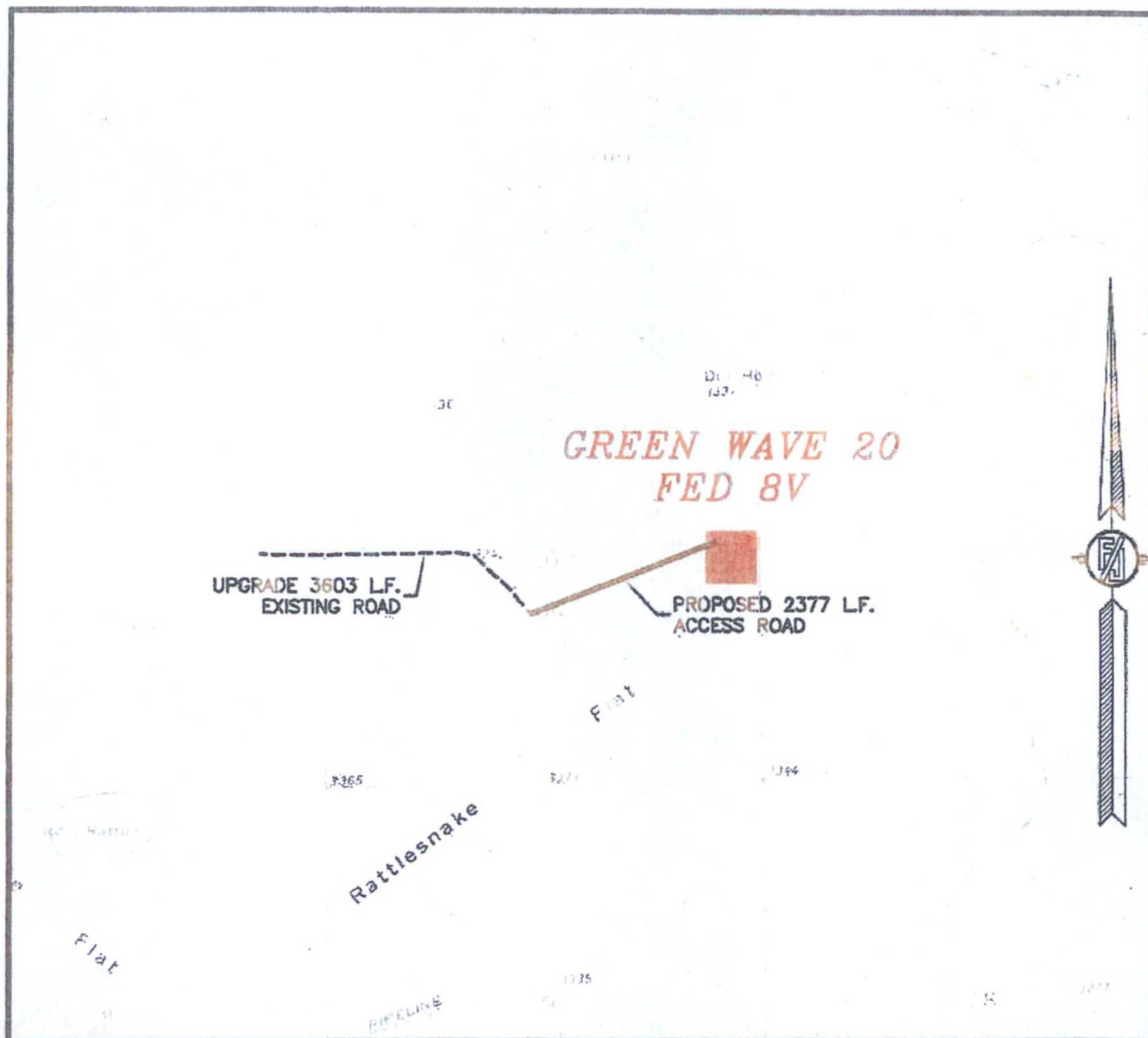
LOCATED 2630 FT. FROM THE NORTH LINE
AND 330 FT. FROM THE EAST LINE OF
SECTION 20, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 7, 2016

SURVEY NO. 3709A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
ANDREWS PLACE

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
GREEN WAVE 20 FED 8V

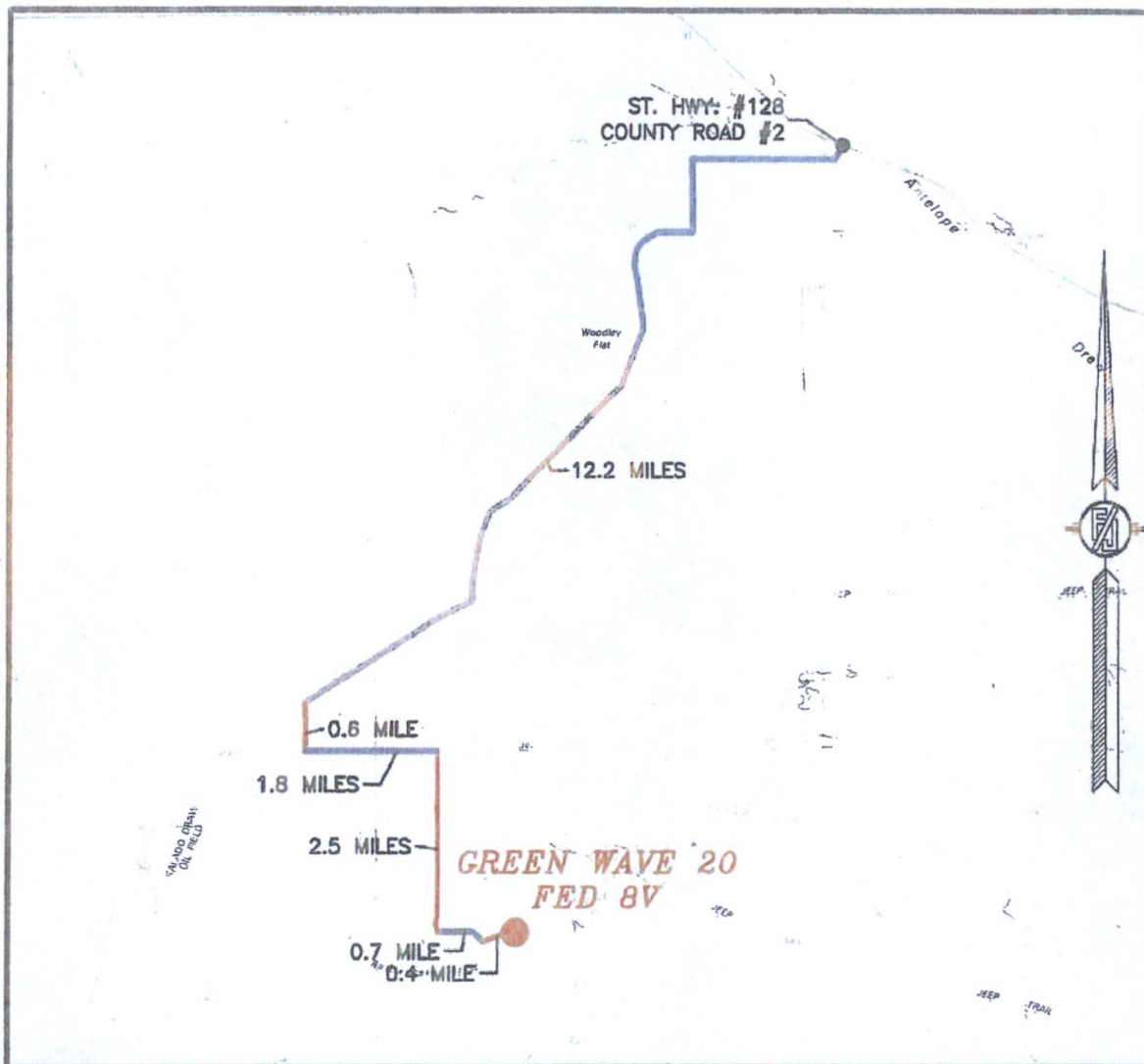
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SEPTEMBER 7, 2016

SURVEY NO. 3709A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HWY #128 AND COUNTY ROAD #2 (BATTLE AXE ROAD) GO SOUTH AND WEST ON BATTLE AXE ROAD APPROX. 12.2 MILES TO A LEASE ROAD ON LEFT (SOUTH) TURN SOUTH GO APPROX. 0.6 MILE ROAD TURNS LEFT (EAST) TURN EAST GO APPROX. 1.8 MILES TO A LEASE ROAD ON RIGHT (SOUTH) TURN SOUTH GO APPROX. 2.5 MILES TO AN EXISTING ROAD ON LEFT (EAST) GO EAST ON EXISTING ROAD APPROX. 0.7 MILE TO A FENCE GATE AND ROAD LATH. FOLLOW ROAD LATHS NORTHEAST APPROX. 0.4 MILE TO LOCATION

DEVON ENERGY PRODUCTION COMPANY, L.P.

GREEN WAVE 20 FED 8V

LOCATED 2630 FT. FROM THE NORTH LINE

AND 330 FT. FROM THE EAST LINE OF

SECTION 20, TOWNSHIP 26 SOUTH,

RANGE 34 EAST, N.M.P.M.

LEA COUNTY, STATE OF NEW MEXICO

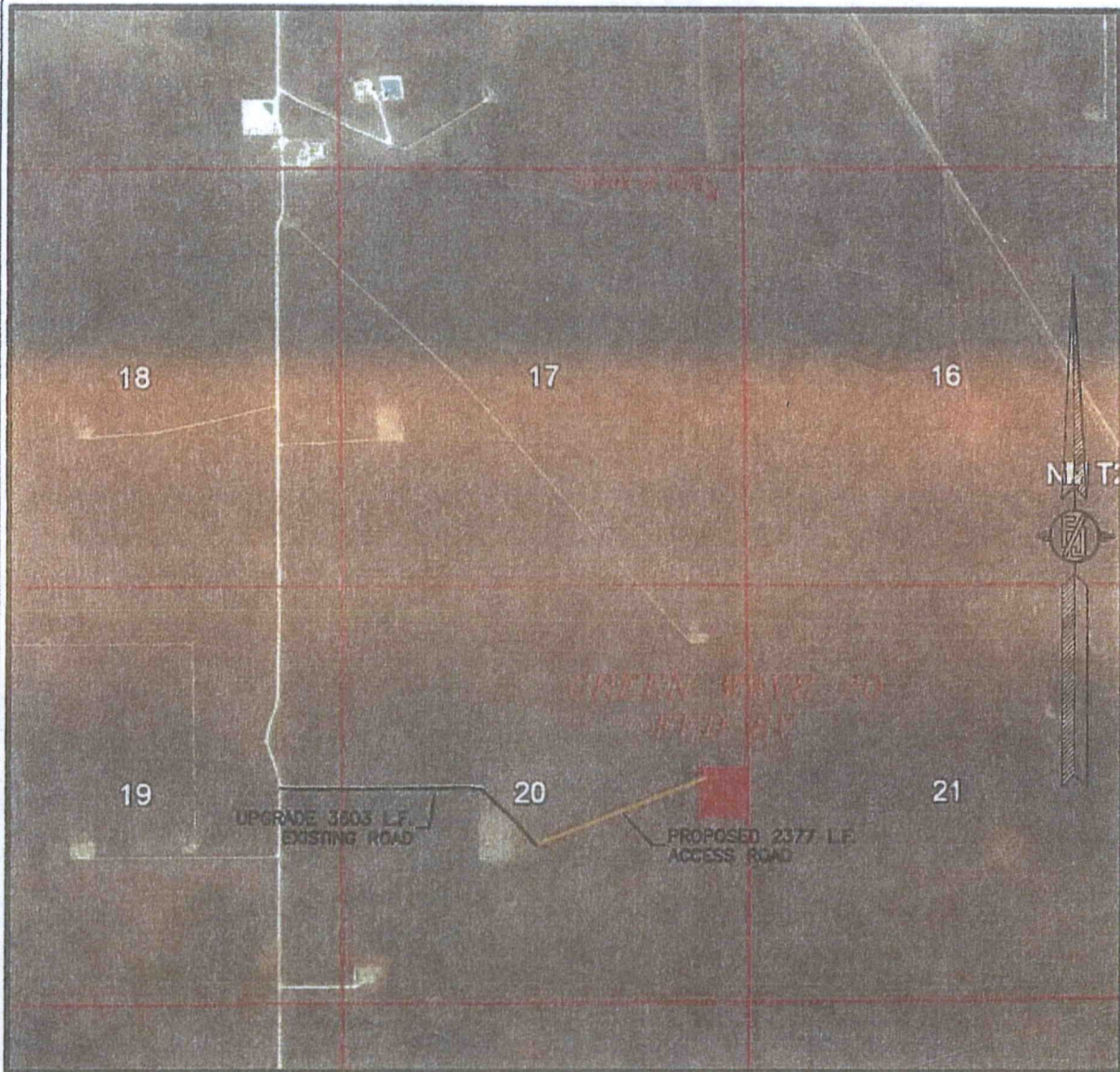
SEPTEMBER 7, 2016

SURVEY NO. 3709A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
APR. 2013

DEVON ENERGY PRODUCTION COMPANY, L.P.
GREEN WAVE 20 FED 8V

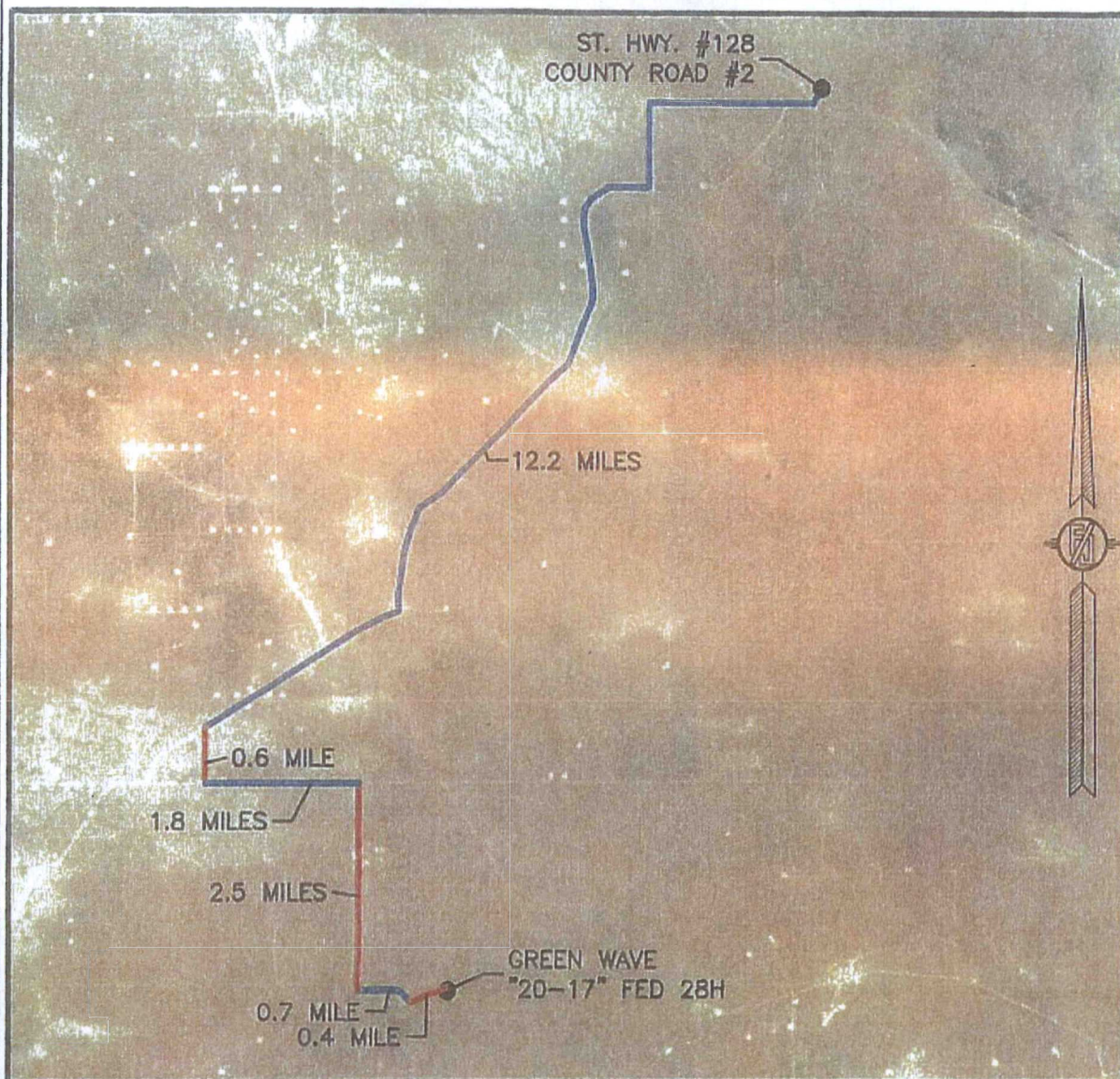
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LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 7, 2016

SURVEY NO. 3709A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
APR. 2013

DEVON ENERGY PRODUCTION COMPANY, L.P.
GREEN WAVE 20 FED 8V

LOCATED 2630 FT. FROM THE NORTH LINE
AND 330 FT. FROM THE EAST LINE OF
SECTION 20, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 7, 2016

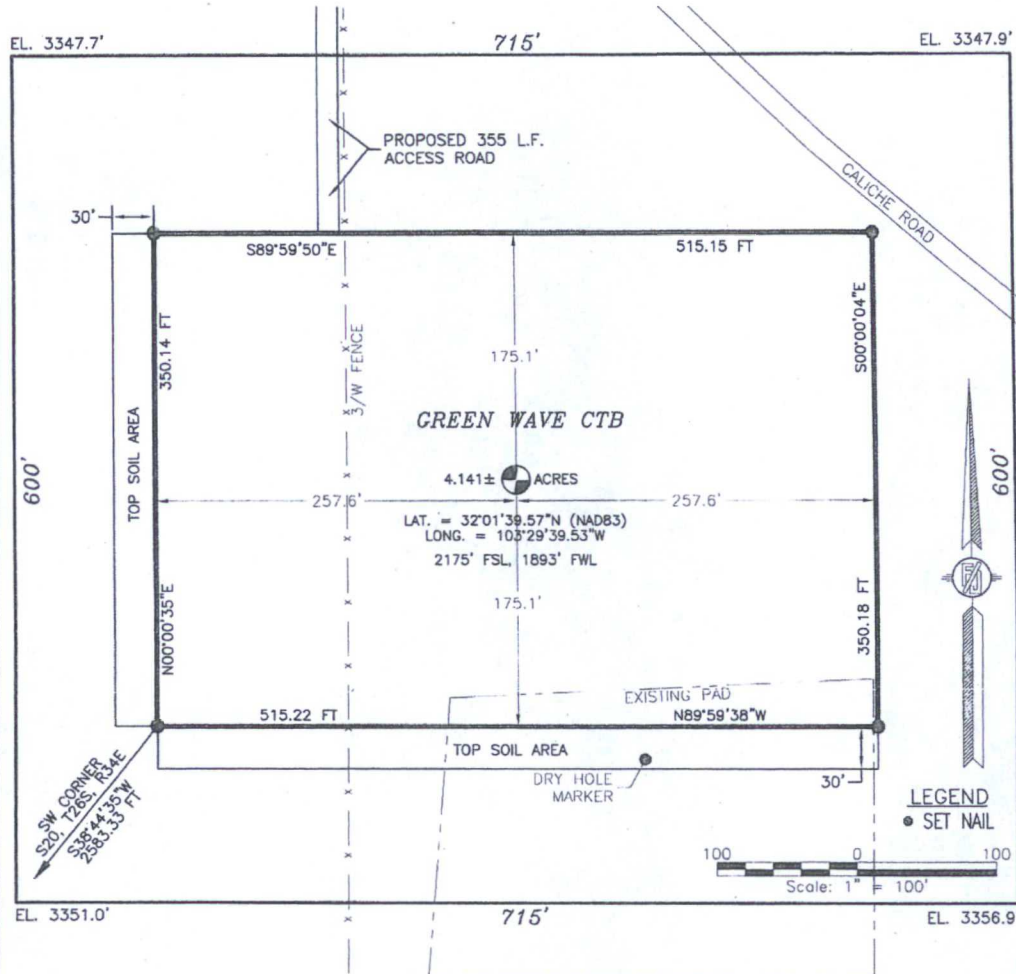
SURVEY NO. 3709A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

GREEN WAVE CTB

DEVON ENERGY PRODUCTION COMPANY, L.P.
IN THE N/2 NE/4 SW/4 OF
SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 18, 2015



DESCRIPTION

A CERTAIN PIECE OR PARCEL OF LAND AND REAL ESTATE LYING IN BUREAU OF LAND MANAGEMENT LAND IN THE N/2 NE/4 SW/4 OF SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

BEGINNING AT THE SOUTHWEST CORNER OF THE PARCEL, WHENCE THE SOUTHWEST CORNER OF SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M. BEARS S38°44'35\"W, A DISTANCE OF 2583.33 FEET;
THENCE N00°00'35\"E A DISTANCE OF 350.14 FEET TO THE NORTHWEST CORNER OF THE PARCEL;
THENCE S89°59'50\"E A DISTANCE OF 515.15 FEET TO THE NORTHEAST CORNER OF THE PARCEL;
THENCE S00°00'04\"E A DISTANCE OF 350.18 FEET TO THE SOUTHEAST CORNER OF THE PARCEL;
THENCE N89°59'38\"W A DISTANCE OF 515.22 FEET TO THE SOUTHWEST CORNER OF THE PARCEL, THE POINT OF BEGINNING;
CONTAINING 4.141 ACRES MORE OR LESS.

GENERAL NOTES

1.) THE INTENT OF THIS SURVEY IS TO ACQUIRE A BUSINESS LEASE FOR THE PURPOSE OF BUILDING A TANK BATTERY

2.) BASIS OF BEARING IS NEW MEXICO STATE PLANE EAST ZONE MODIFIED TO THE SURFACE (NAD83)

DRIVING DIRECTIONS: FROM INTERSECTION OF STATE HWY #128 AND COUNTY ROAD #2 GO SOUTH AND WEST 12.2 MILES, TURN SOUTH AT LEASE ROAD GO 0.6 MILE, TURN EAST GO 1.9 MILES, TURN SOUTH AT LEASE ROAD GO 2.5 MILES, TURN EAST AT LEASE ROAD GO 0.5 MILE TO GREEN WAVE CTB.

SHEET: 1-3

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 21 DAY OF SEPTEMBER 2015

FILMON F. JARAMILLO, P.E.S. 12797
301 SOUTH CANAL
(575) 234-3341

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 4088A

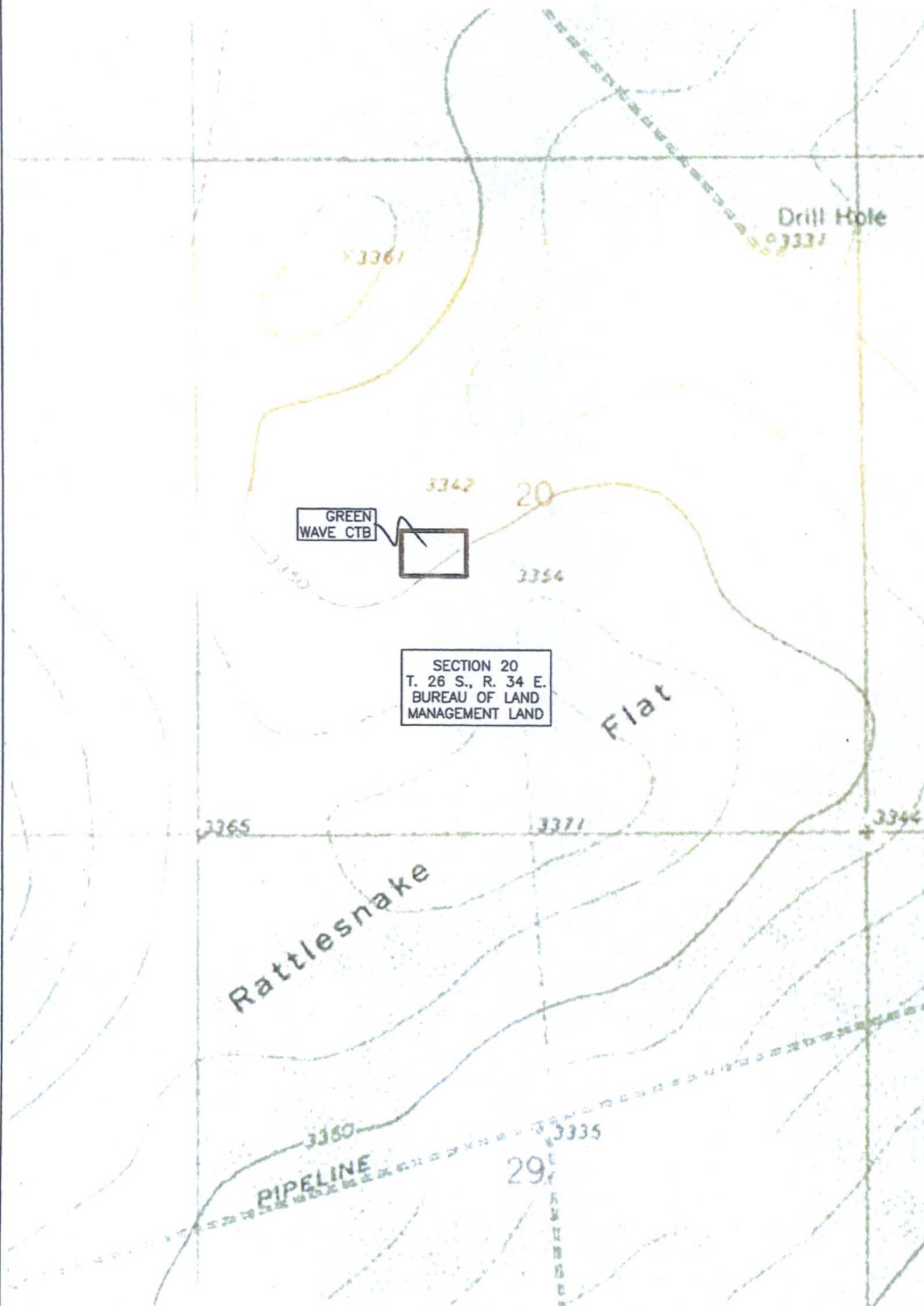
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

GREEN WAVE CTB

DEVON ENERGY PRODUCTION COMPANY, L.P.
IN THE N/2 NE/4 SW/4 OF
SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 18, 2015

QUAD MAP



SHEET: 2-3

CAI

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 234-3341

SURVEY NO. 4088A

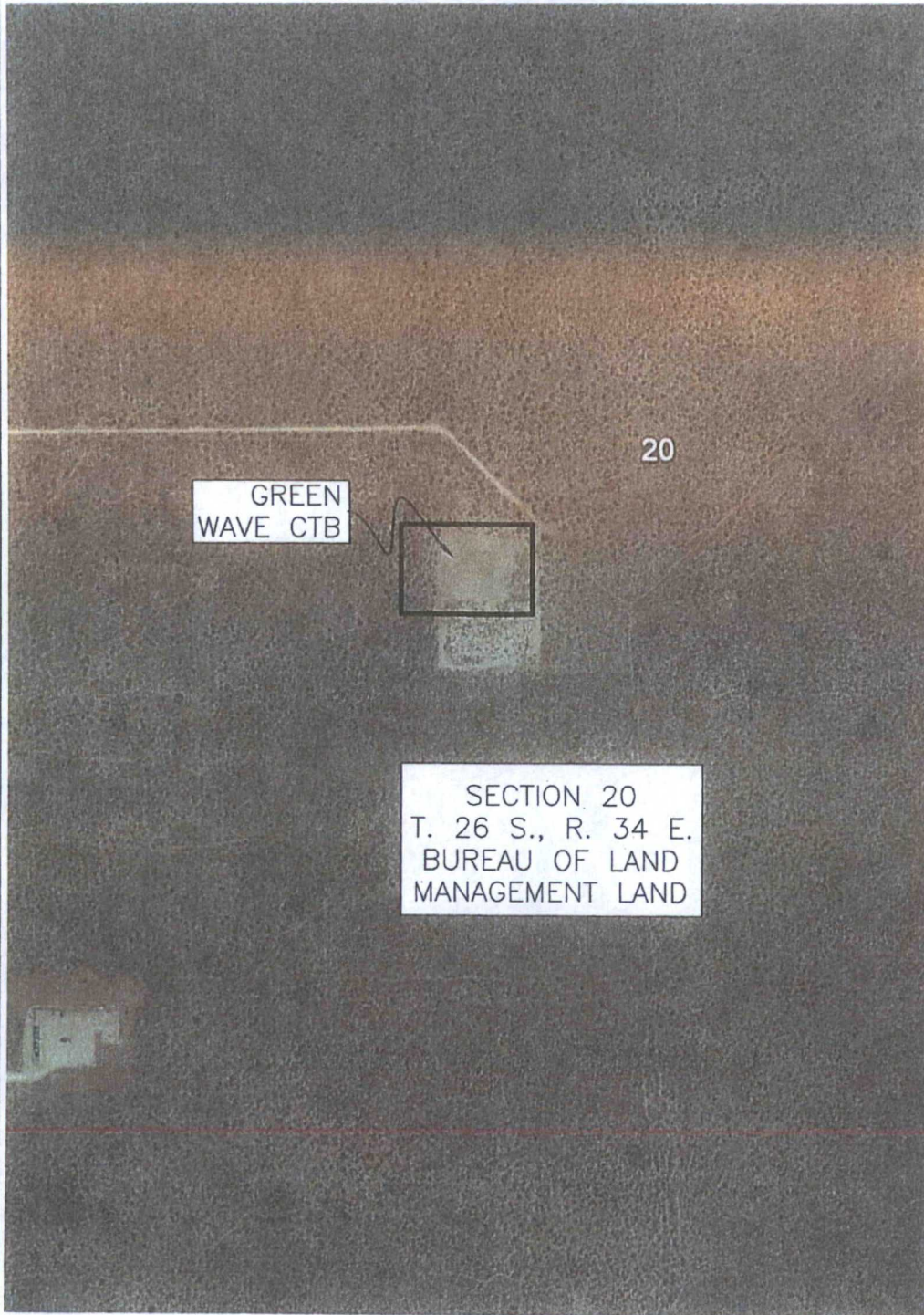
CARLSBAD, NEW MEXICO

GREEN WAVE CTB

DEVON ENERGY PRODUCTION COMPANY, L.P.
IN THE N/2 NE/4 SW/4 OF
SECTION 20, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 18, 2015

AERIAL PHOTO



GREEN
WAVE CTB

20

SECTION 20
T. 26 S., R. 34 E.
BUREAU OF LAND
MANAGEMENT LAND

SHEET: 3-3

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

SURVEY NO. 4088A

1. Geologic Formations

TVD of target	14,208'	Pilot hole depth	N/A
MD at TD:	14,208'	Deepest expected fresh water:	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	795	Barren	
Salado	1,265	Barren	
Bell Canyon	5,380	Oil	
Cherry Canyon	6,415	Oil	
Lower Brushy Canyon	9,415	Oil	
Bone Spring	9,615	Oil	
Leonard Shale (UPR)	9,640	Oil	
Leonard Shale (UPR Base)	9,925	Oil	
1 st Bone Spring Sand	10,580	Oil	
2 nd Bone Spring Sand	11,093	Oil	
3 rd Bone Spring Sand	12,178	Oil	
Wolfcamp XY	12,643	Oil	
Wolfcamp A	12,828	Oil	
Wolfcamp B	13,858	Oil	
Vertical Well TD	14,208	Oil	

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	820'	13.375"	54.5	J-55	BTC	3.74	1.79	6.15
12.25"	0	12,100'	9.625"	40	P-110	BTC	1.31	2.31	2.46
8.75"	0	12,100'	7"	29	P-110	BTC	2.08	1.32	1.92
8.75"	12,100'	14,208	5.5"	17	P-110	BTC	1.61	1.25	3.78
BLM Minimum Safety Factor							1.125	1.00	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	H ₂ O gal/sk	Yld ft ³ / sack	500# Comp. Strength (hours)	Slurry Description
13-3/8" Surface	860	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
9-5/8" Inter.	1460	11	19.82	3.2	45	Lead: NeoCem®
	790	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
9-5/8" Interme diate Two Stage	750	11	19.82	3.2	45	1 st Stage Lead: NeoCem®
	790	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
	DV Tool = 5000ft					
	640	11	19.82	3.2	45	2 nd Stage Lead: NeoCem®
	180	14.8	6.32	1.33	6	2 nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
7 x 5- 1/2" Prod	50	11	19.82	3.2	45	2 nd Stage Lead: NeoCem®
	560	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
13-3/8" Surface	0'	100%
9-5/8" Intermediate	0'	50%
9-5/8" Intermediate – Two Stage Option	1 st Stage = 5000' / 2 nd Stage = 0'	50%
7 x 5-1/2" Production Casing	11,100'	25%

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
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BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12-1/4"	13-5/8"	5M	Annular	x	50% of working pressure
			Blind Ram		5M
			Pipe Ram		
			Double Ram	x	
			Other*		
8-3/4"	13-5/8"	5M	Annular	x	50% testing pressure
			Blind Ram		5M
			Pipe Ram		
			Double Ram	x	
			Other *		
			Annular		50% testing pressure
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other *		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke

Devon Energy, Green Wave 20 Fed 8V

	Manifold. See attached for specs and hydrostatic test chart.
Y	Are anchors required by manufacturer?
Y	<p>A multibowl wellhead may be used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.</p> <p>Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.</p> <ul style="list-style-type: none"> • Wellhead will be installed by wellhead representatives. • If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal. • Wellhead representative will install the test plug for the initial BOP test. • Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 5M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time. • If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted. • Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating. • Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2. <p>After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 5M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 5,000 psi high pressure test. The 5,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.</p> <p>After running the 9-5/8" intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 5M will already be installed on the wellhead.</p> <p>The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5,000 psi WP.</p> <p>Devon's proposed wellhead manufactures will be FMC Technologies, Cactus Wellhead, or Cameron.</p> <p>Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal</p>

	turns.
	See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	820'	FW Gel	8.6-8.8	28-34	N/C
820'	12,100'	Oil Based Mud	8.7-9.0	40-50	10-15
12,100'	14,208'	LSND Mud	10.0-11.0	35-40	10-15

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

6. Logging and Testing Procedures

Logging, Coring and Testing.	
x	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
x	Quad Combo is planned on being taken from intermediate shoe to TD
	Drill stem test? If yes, explain
x	Coring? If yes, explain – 600' of whole core will be taken from the Wolfcamp. The coring interval will be approximately from 13,148' to 13,748' MD. Sidewall cores will also be taken from the Upper Wolfcamp. Exact SWC locations and quantity are TBD.

Additional logs planned	Interval
Resistivity	Int. shoe to KOP
Density	Int. shoe to KOP
X CBL	Production casing
X Mud log	Intermediate shoe to TD
PEX	

7. Drilling Conditions

Devon Energy, Green Wave 20 Fed 8V

Condition	Specify what type and where?
BH Pressure at deepest TVD	7388 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

Is this a walking operation? No.

Will be pre-setting casing? No.

Attachments

☒ Directional Plan

☐ Other, describe

Devon Energy

Planning Report

Database: EDM r5000 US Production
 Company: WESTERN DIVISION
 Project: PBNM
 Site: Dzurisin
 Well: Green Wave 20 Fed 8V
 Wellbore: Wellbore #1
 Design: Plan 1

Local Co-ordinate Reference: Well Green Wave 20 Fed 8V
 TVD Reference: 1 @ 3366.10ft
 MD Reference: 1 @ 3366.10ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project	PBNM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Dzurisin		
Site Position:		Northing:	429,922.27 usft
From:	Map	Easting:	725,391.41 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	32.180535
		Longitude:	-103.738424
		Grid Convergence:	0.32 °

Well	Green Wave 20 Fed 8V		
Well Position	+N/-S -54,617.23 ft	Northing:	375,305.15 usft
	+E/-W 79,020.77 ft	Easting:	804,412.02 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	32.028952
		Longitude:	-103.484420
		Ground Level:	3,342.60 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/21/2016	6.88	59.89	47,982

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14,208.00	0.00	0.00	14,208.00	0.00	0.00	0.00	0.00	0.00	0.00	

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Planned Survey

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Devon Energy

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5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00
10,500.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00	0.00
10,600.00	0.00	0.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00
10,700.00	0.00	0.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00

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10,800.00	0.00	0.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.00
10,900.00	0.00	0.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.00
11,000.00	0.00	0.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.00
11,100.00	0.00	0.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.00
11,200.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00	0.00
11,300.00	0.00	0.00	11,300.00	0.00	0.00	0.00	0.00	0.00	0.00
11,400.00	0.00	0.00	11,400.00	0.00	0.00	0.00	0.00	0.00	0.00
11,500.00	0.00	0.00	11,500.00	0.00	0.00	0.00	0.00	0.00	0.00
11,600.00	0.00	0.00	11,600.00	0.00	0.00	0.00	0.00	0.00	0.00
11,700.00	0.00	0.00	11,700.00	0.00	0.00	0.00	0.00	0.00	0.00
11,800.00	0.00	0.00	11,800.00	0.00	0.00	0.00	0.00	0.00	0.00
11,900.00	0.00	0.00	11,900.00	0.00	0.00	0.00	0.00	0.00	0.00
12,000.00	0.00	0.00	12,000.00	0.00	0.00	0.00	0.00	0.00	0.00
12,100.00	0.00	0.00	12,100.00	0.00	0.00	0.00	0.00	0.00	0.00
12,200.00	0.00	0.00	12,200.00	0.00	0.00	0.00	0.00	0.00	0.00
12,300.00	0.00	0.00	12,300.00	0.00	0.00	0.00	0.00	0.00	0.00
12,400.00	0.00	0.00	12,400.00	0.00	0.00	0.00	0.00	0.00	0.00
12,500.00	0.00	0.00	12,500.00	0.00	0.00	0.00	0.00	0.00	0.00
12,600.00	0.00	0.00	12,600.00	0.00	0.00	0.00	0.00	0.00	0.00
12,700.00	0.00	0.00	12,700.00	0.00	0.00	0.00	0.00	0.00	0.00
12,800.00	0.00	0.00	12,800.00	0.00	0.00	0.00	0.00	0.00	0.00
12,900.00	0.00	0.00	12,900.00	0.00	0.00	0.00	0.00	0.00	0.00
13,000.00	0.00	0.00	13,000.00	0.00	0.00	0.00	0.00	0.00	0.00
13,100.00	0.00	0.00	13,100.00	0.00	0.00	0.00	0.00	0.00	0.00
13,200.00	0.00	0.00	13,200.00	0.00	0.00	0.00	0.00	0.00	0.00
13,300.00	0.00	0.00	13,300.00	0.00	0.00	0.00	0.00	0.00	0.00
13,400.00	0.00	0.00	13,400.00	0.00	0.00	0.00	0.00	0.00	0.00
13,500.00	0.00	0.00	13,500.00	0.00	0.00	0.00	0.00	0.00	0.00
13,600.00	0.00	0.00	13,600.00	0.00	0.00	0.00	0.00	0.00	0.00
13,700.00	0.00	0.00	13,700.00	0.00	0.00	0.00	0.00	0.00	0.00
13,800.00	0.00	0.00	13,800.00	0.00	0.00	0.00	0.00	0.00	0.00
13,900.00	0.00	0.00	13,900.00	0.00	0.00	0.00	0.00	0.00	0.00
14,000.00	0.00	0.00	14,000.00	0.00	0.00	0.00	0.00	0.00	0.00
14,100.00	0.00	0.00	14,100.00	0.00	0.00	0.00	0.00	0.00	0.00
14,208.00	0.00	0.00	14,208.00	0.00	0.00	0.00	0.00	0.00	0.00

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Devon Energy Production Co
Green Wave 20 Fed 8V
NMNM114991

10/17/2016

Conditions of Approval

Monitoring Well status approval requires a successful mechanical or casing integrity test every subsequent year after initial approval as follows:

1. A Notice of Intent (NOI) Sundry Notice (Form 3160-5) requesting approval to run a mechanical integrity test (MIT) or casing integrity test (CIT).
2. A description of the procedure.
 - a. A bridge plug or packer must be installed as close to 50 feet above any open perforations or open hole as possible. If a cement plug is used, the top of the cement must be verified by tagging. CIBP must be capped with minimum 25 sacks cement, placed with tubing, or 35 feet of cement if placed with bailer.
 - b. The wellbore must be filled with corrosion inhibited fluid and pressure tested to 500 psi. The casing shall be capable of holding this pressure for at least 30 minutes. Any leak-off will be evaluated.
 - c. All downhole production/injection equipment (tubing, rods, etc.) shall be removed from the casing if they are not isolated by a packer.
 - d. A bradenhead test must be conducted. If the test indicates a problem exists, a remedial plan and time frame for remediation shall be submitted within ninety (90) days of the test.
 - e. Contact the appropriate BLM office at least 24 hours prior to the scheduled Casing Integrity Test. For wells in Eddy County, 575-361-2822; Lea County 575-393-3612.
3. **Provide justification why the well should be monitoring well rather than producing or permanently plugged and abandoned and an estimated date that the well will be returned to beneficial use or plugged and abandoned. 43 CFR 3162.3-4 (a) The operator shall promptly plug and abandon...wells in which oil or gas is not encountered in paying quantities...**

Wells that successfully pass the casing integrity test may be approved for Monitoring Well status provided that the operator:

1. **Submits a subsequent Sundry Notice** (Form 3160-5) requesting Monitoring Well approval with well bore diagram with all perforations and CIBP's and tops of cement on CIBP's.
2. Describes the procedure.
3. Attaches a clear copy or the original of the pressure test chart.
4. Give justification to allow well to be place in Monitoring well status and plan for future use of well with time frame that well will be producing or plans to P&A well will be submitted.

If the well does not pass the casing integrity test, then the operator shall within 30 days submit to BLM for approval one of the following:

1. A procedure to repair the casing so that a Monitoring well status can be granted.
2. A procedure to plug and abandon the well.

Green Wave 20 Fed V8

1. Well is approved to be Monitoring Well Status for a period of 12 months or until 10/17/2017
2. Must submit NOI to reevaluate Monitoring Well Status or NOI to produce or NOI to P&A. Must be submitted by 10/17/2017
3. COA's met at this time.

10 17
COA et at this