### OCC Operator No 24125

### OKLAHOMA CORPORATION COMMISSION

Oil & Gas Conservation Division, UIC Department Post Office Box 52000

Oklahoma City, Oklahoma 73152-2000

NOTE: Annotate one of the fee options on Page 2.

UIC RECEIVED 3/24/2021 Form 1015 REV 05/19 Page 1 of 2

Application No. 2100302405

existing order?	$\times$	Application For Administr		No. 202100	055
Previous Order No(s).	534435	OAC 165:10-5-	-5 (	(If emergency order is	used or application is protested)
Applicant	Petroleum LLC		COMMERCIAL DISPO	SAL WELL	CILE
Address		1.0.11.450	ENHANCED RECOVE	RY INJECTION WELL	
City	Expressway Sout	n, Suite 150 Zip	DISPOSAL WELL		MAR 2 5 2021
Allen E-mail Address	TX	75013	LPG		COURT CLERK'S OFFICE - CORPORATION COMMISS
	durepetro.com				OF OKLAHOMA
Vell Name and Number Camrick Un	it 2811		WELL TO BE:		
Vell Location SHL:	TOWNS TO A PARTY OF THE PARTY O	/4, <sub>NE</sub> 1/4, <sub>NE</sub> 1/4	PERMIT MODIFICATION	ON PP	MODIFICATION REASON:
BHL:		/4, NE 1/4, NE 1/4 /4, 1/4, 1/4	DRILLED	1	dd Fresh Water
Section	Township	Range		1	hange Inj Rate hange Inj Pressure
.atitude	01N Longitude	20ECM	CONVERTED		nange inj r ressare
36.526448		100.9048	DIRECTIONAL (GIVE	THE BHL)	
Beaver			MORE THAN ONE LAT	TERAL	
API No. 35-007	7-35220		Туре	of fluids to be dispo	osed or injected:
Jnit Name Camric				X CO2 H2S	·
				X   CO2	Fresh Water Natural Gas
		Well Da	1		
	n active or reserve municipal		; 1		
	ain oil, gas, or fresh water with		No If yes, state which:	Oil & Gas	
ecation of source of fluid eclogic name(s) and de	Opper mono	er Morrow	Perforation of inj		7310 bottom 7326
eologic name or names		- 100 t t t		994499	
ormalions of injection zo	ne:				
	Commission maps	Dan Walkup - OCC	Intervening thickness (I minus base of treatable		00
lase of frealable water 400	x Other source (speci	(V).			
400 verage porosity	X Other source (speci	Average permeability (Kw):	Pre	esent formation pressure	e <u>or</u>
400 verage porosity 15.2	2	Average permeability (Kw):	MD Shi	ul-in static fluid level from	e <u>or</u> n surface: 2410 psi
400 verage porosity 15.2 jection rates Req	2	Average permeability (Kw):	MD Pre Shi  ICF Requested Inject	ul-in static fluid level from	e <u>or</u> m surface: 2410 psi 00 PSI
400 rerage porosity 15.2 lection rates Required pressures: Approximates	2 uested Injection Rate roved Injection Rate	Average permeability (Kw):  24 [ 000 BPD/4000 MCF BPD/M BPD/M	MD Pro- Sthi  ICF Requested Inject  Approved Injection	ul-in static fluid level from tion Pressure 300 on Pressure	e <u>or</u> n surface: 2410 psi 00 PSI PSI
400 verage porosity 15.2 jection rates Required pressures: Appropriate Appropr	uested Injection Rate roved Injection Rate	Average permeability (Kw):  24 1 000 BPD/4000 MCF BPD/M BPD/M  Setting Depth	MD Shi  ICF Requested Inject  ICF Approved Injecti	ut-in static fluid level from tion Pressure 300 on Pressure Top of Cemen	e <u>or</u> m surface: 2410 psi 00
400 verage porosity 15.2 jection rates Required pressures: Appropriate Appropr	uested Injection Rate roved Injection Rate  Size  13 3/8	Average permeability (Kw):  24 1 000 BPD/4000 MCF BPD/M BPD/M  Setting Depth 580	MD Stirl  MCF Requested Inject  MCF Approved Injecti  Sacks of Cement  640	ut-in static fluid level froi tion Pressure 300 on Pressure Top of Cemen Surface	e or m surface: 2410 psi 00 PSI PSI t Determined By Calculated
400 verage porosity 15.2 election rates Required pressures: Apple lame of string SURFACE NTERMEDIATE	uested Injection Rate roved Injection Rate  Size  13 3/8  8 5/8	Average permeability (Kw):  24 1 000 BPD/4000 MCF BPD/M BPD/M  Setting Depth  580 4637	MD Shi  ICF Requested Inject  CF Approved Inject  Sacks of Cement  640  350	ut-in static fluid level froi tion Pressure 300 on Pressure 300 Top of Cemen Surface Surface	t Determined By Calculated Calculated
400 Average porosity 15.2 Anjection rates Required pressures: Approved Pressures Approved	uested Injection Rate roved Injection Rate  Size  13 3/8	Average permeability (Kw):  24 1 000 BPD/4000 MCF BPD/M BPD/M  Setting Depth 580	MD Stirl  MCF Requested Inject  MCF Approved Injecti  Sacks of Cement  640	ut-in static fluid level froi tion Pressure 300 on Pressure Top of Cemen Surface	e or m surface: 2410 psi 00 PSI PSI t Determined By Calculated
400 Average porosity 15.2 Algertion rates Required pressures: Apple Appl	uested Injection Rate roved Injection Rate  Size  13 3/8  8 5/8	Average permeability (Kw):  24 1 000 BPD/4000 MCF BPD/M BPD/M  Setting Depth  580 4637	MD Shi  ICF Requested Inject  CF Approved Inject  Sacks of Cement  640  350	ut-in static fluid level froi tion Pressure 300 on Pressure 300 Top of Cemen Surface Surface	t Determined By Calculated Calculated

I declare that I have knowledge of the contents of this report and am authorized by my organization to make this report, which was prepared by me or under my supervision and direction with the data and facts stated herein to be true, correct and complete to the best of my knowledge and belief.

Signature

2-22-21 Dale

806-672-1029

Phone A/C Number

Name & Title (Typed or Printed)
Form 1015 (Continued)

Form 1015 REV 05/19 Page 2 of 2

1. Attach \$250 filing fee for injection and noncommercial disposal; or \$1,500.00 for commercial disposal well application.

- 2. Notice that an application has been filed shall be published by the applicant in a newspaper of general circulation in the county in which the well is located and in a newspaper of general circulation published in Oklahoma City, Oklahoma. The applicant shall file proof of publication before the application is approved. The notice shall include the application number, depth of injection interval zone, injection pressure, and volume. If no written objection is received within 15 days (30 days for commercial) from the date of publication, the application may be approved administratively.
- 3. In addition to filing Form 1015, an affidavit of mailing or delivery with names and addresses of those notified shall be filed not later than five days after the application is filed.
- 4. The well must be in the applicant's name and the applicant must have appropriate surety before the application may be approved.
- 5. Attach signed analysis of fresh water from two or more producing wells within a one mile radius of the injection well or a notarized statement as to why samples were not submitted. The analysis must include at least Na+, CI- andTDS.
- 6. Attach signed analysis of representative sample of water to be injected. The analysis must include at least Na+, CI- and TDS, and must have the exact legal location where the sample was taken.
- 7. Attach plat showing subject well and total depths of all known oil and gas wells, abandoned, drilling and dry holes within 1/4 radius mile for noncommercial wells and within a 1/2 mile radius for commercial wells.
- 8. Attach Completion Report Form 1002A. If well is not in applicant's name, attach a 1073i or 1073 as needed.
- 9. Attach electric or radioactivity log of the subject well.
- 10. Attach schematic drawing of subsurface facilities including: casing size, setting depth, amount of cement used, measured or calculated, tops of cement, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone, showing top and bottom of injection interval.
- 11. The original application and one complete set of attachments shall be mailed to the Corporation Commission's Underground Injection Control Department.
- 12. Delivery of application to surface owner(s) and offset operators. New rules for commercial and a non-commercial well exceeding 5000 BBLS a day, refer to OAC 165:10-5-5 (c ). Non-commercial Under 5000 BBLS deliver to offset-operators within 1/2 mile.
- 13. A noncommercial well shall not be used for injection or disposal unless annual fluid injection report Form 1012A is filed by January 31st each year.

  There is a \$25 "per well" filing fee or a \$2,500 filing fee for more than 100 wells (OAC 165:5-3-1(B)(1)(T)(ii-iii)). Operators of commercial wells are required to submit a Form 1012C (Commercial Disposal Well Semiannual Fluid Disposal Report) by January 31st and July 31st of each year. There is a \$500 semiannual filing fee to file the Form 1012C (OAC 165:5-3-1(b)(T)(ii)).
- 14. A well must have an API Number.
- 15. Permit Modification: The application shall State the reason for the modification. Please refer to OAC 165:5-7-30.

I he names and	addresses of those to whom copies of this a	application and attachments have	been sent:	
NAME	ADDRESS	CITY	STATE	ZIP
G. Don & Sharon Williams	808 Fox Bend Trail	Edmond	ок	73034
NAME	ADDRESS	CITY	STATE	ZIP
Albert E. Littau	Rt 1, Box 108	Balko	OK	73931
NAME	ADDRESS	CITY	STATE	ZIP
Robert & Janice Lee Goetzinge	r PO Box 613	Beaver	OK	73932
NAME	ADDRESS	CITY	STATE	ZIP
NAME	ADDRESS	CITY	STATE	ZIP
NAME	ADDRESS	CITY	STATE	ZIP
NAME	ADDRESS	CITY	STATE	ZIP
NAME	ADDRESS	СІТУ	STATE	ZIP

### OCC FEE SCHEDULE EFFECTIVE 10-1-2018

(mark only one of the check-boxes below)

COMMERC	CIAL
DISPOSAL V	WELL

\$1,500

OAC 165:5-3-1(b)(1)(A)

NON-COMMERCIAL INJECTION OR DISPOSAL WELL

\$250

OAC 165:5-3-1(b)(1)(E)

#### OKLAHOMA CITY MAILING ADDRESS:

Oklahoma Corporation Commission Attention: Central Processing P.O. Box 52000 Oklahoma City, OK 73152-2000

(checks or money orders only)

### HAND-DELIVERY STREET ADDRESS:

The Jim Thorpe Office Building (Take to the Cashier on the First Floor) 2101 N. Lincoln Blvd. Oklahoma City, OK 73105

(cash, checks or money orders only)

♣ RECEIPT NO

# DownHole SAT A Water Analysis Report

### SYSTEM IDENTIFICATION

#### SISIEM IDENITION

Perdure Petroleum LLC CAMRICK WATER WELL 1 DAVID WITCHER FRESH WATER WELL BEAVER OK disolved o2 8

# Sample ID#:

5787 262858

Sample ID: Sample Date:

08-19-2020 at 0000 08-27-2020

Report Date:

SCALE AND CORROSION POTENTIAL

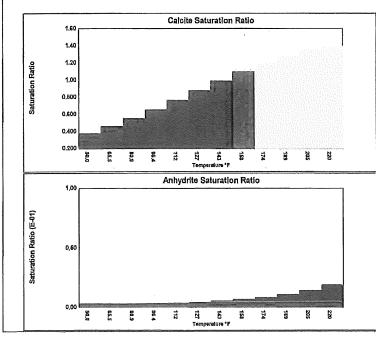
**BJACAM** 

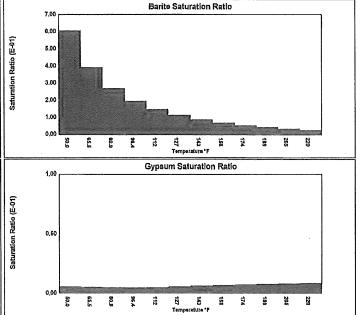
### WATER CHEMISTRY

CATIONS		ANIONS	
Calcium(as Ca)	271.70	Chloride(as CI)	6100
Magnesium(as Mg)	90.78	Sulfate(as SO <sub>4</sub> )	25.00
Barium(as Ba)	0.231	Bromine(as Br)	0.00
Strontium(as Sr)	12.29	Dissolved CO2(as CO2)	50.00
Sodium(as Na)	3552	Bicarbonate(as HCO <sub>3</sub> )	244.00
Potassium(as K)	16.02	Carbonate(as CO <sub>3</sub> )	0.00
Lithium(as Li)	0.343	Silica(as SiO <sub>2</sub> )	0.00
Iron(as Fe)	9.30	Phosphate(as PO <sub>4</sub> )	0.00
Field Iron(as Fe)	0.00	H <sub>2</sub> S (as H <sub>2</sub> S)	0.00
Ammonia(as NH <sub>3</sub> )	0.00	Fluoride(as F)	0.00
Aluminum(as AI)	0.0720	Nitrate(as NO <sub>3</sub> )	0.00
Manganese(as Mn)	0.276	Boron(as B)	0.808
Zinc(as Zn)	0.416		
Lead(as Pb)	0.00		
		PARAMETERS	
Temperature(OF)	60.00	Sample pH	6.90
Conductivity	12783	Sp.Gr.(g/mL)	1.00
Resistivity	78.23	T.D.S.	10410

_	_	_															
Temp.	Press.	(	Calcite	An	hydrite	G)	/psum		Barite	Ce	elestite	S	iderite	Mac	kawenite	$co_2$	$pCO_2$
( <sup>O</sup> F)	(atm)	C	CaCO <sub>3</sub>	C	aSO <sub>4</sub>	CaSC	0 <sub>4</sub> *2H <sub>2</sub> O	E	3aSO <sub>4</sub>	5	SrSO <sub>4</sub>	F	eCO3		FeS	(mpy)	(atm)
50.00	0.00	0.379	-0.168	0.00318	-849.87	0.00566	-682.31	0.606	-0.0883	0.0125	-87.51	18.45	0.112	0.00	-0.0258	0.0501	0.0222
65,45	0.00	0.461	-0,127	0.00306	-858,25	0.00526	-703.69	0.392	-0.209	0.0117	-90.15	25.26	0.121	0.00	-0.0312	0.0937	0.0222
80.91	0.00	0.554	-0.0924	0.00311	-838.94	0.00499	-716.80	0.270	-0.361	0.0115	-89,80	33.85	0.129	0.00	-0.0365	0.0562	0.0222
96.36	0.00	0.657	-0,0634	0.00332	-796,62	0.00482	-722.33	0.196	-0.542	0.0118	-87.86	44.40	0.137	0.00	-0.0417	0.0736	0.0222
111.82	0.00	0.766	-0.0388	0.00370	-736.89	0.00508	-690.20	0.148	-0.747	0.0121	-85,32	57.01	0.145	0.00	-0.0466	0.0772	0.0222
127.27	0.00	0.880	-0.0180	0.00429	-665.53	0.00565	-637.56	0.114	-0.998	0.0125	-83.10	71,60	0.152	0.00	-0.0523	0.0647	0.0222
142,73	0.00	0.994	>-0.001	0.00515	-587.86	0.00622	-592.41	0.0879	-1.30	0.0127	-81.24	87.82	0.157	0.00	-0.0589	0.0525	0.0222
158,18	0.00	1.10	0.0130	0.00637	-508.44	0.00678	-553.60	0.0685	-1.67	0.0129	-79.71	105.14	0.162	0.00	-0.0669	0.0547	0.0222
173.64	0.00	1.20	0.0240	0.00809	-430.90	0.00732	-520.22	0.0537	-2.10	0.0130	-78,49	123.07	0.165	0.00	-0.0764	0.0566	0.0222
189.09	0.00	1.29	0.0324	0.0105	-357.92	0.00782	-491.52	0.0424	-2.60	0.0131	-77,55	140.74	0.166	0.00	-0.0880	0.0285	0.0222
204.55	0.00	1.36	0.0384	0.0140	-291.33	0.00830	-466.92	0.0336	-3.18	0.0130	-76.88	157.41	0.166	0.00	-0,102	0.0239	0.0222
220.00	0.171	1.40	0.0416	0.0187	-235.88	0.00861	-452.34	0.0264	-3.91	0.0127	-77,39	171.32	0.167	0.00	-0.121	0.0325	0.0260
			Lbs per		Lbs per	,	Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		
		xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000		
			Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. {Ca}{CO<sub>3</sub>}/K<sub>sp</sub>. pCO<sub>2</sub> (atm) is the partial pressure of CO<sub>2</sub> in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.





## **DownHole SAT** A Water Analysis Report

### SYSTEM IDENTIFICATION

### Perdure Petroleum LLC WATER WELL AT HOUSE BY 2171 DAVID WITCHER WATER WELL BEAVER OK

Sample ID#: Sample ID:

5787 264704

Sample Date: 09-28-2020 at 0000

Report Date: 10-05-2020

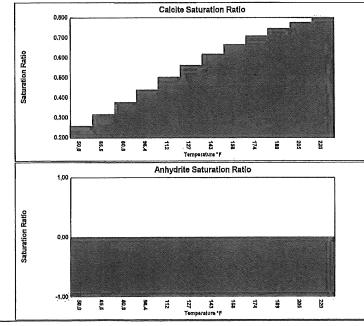
### **WATER CHEMISTRY**

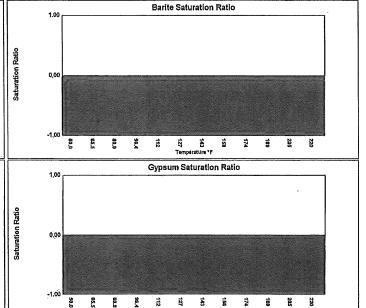
CATIONS		ANIONS	
Calcium(as Ca)	40.83	Chloride(as CI)	1000
Magnesium(as Mg)	27.01	Sulfate(as SO <sub>4</sub> )	0.00
Barium(as Ba)	0.00	Bromine(as Br)	0.00
Strontium(as Sr)	0.234	Dissolved CO2(as CO2)	20.00
Sodium(as Na)	603.88	Bicarbonate(as HCO <sub>3</sub> )	146.00
Potassium(as K)	3.85	Carbonate(as CO <sub>3</sub> )	0.00
Lithium(as Li)	0.00	Silica(as SiO <sub>2</sub> )	0.00
Iron(as Fe)	0.0510	Phosphate(as PO <sub>4</sub> )	0.00
Field Iron(as Fe)	0.00	H <sub>2</sub> S (as H <sub>2</sub> S)	0.00
Ammonia(as NH <sub>3</sub> )	0.00	Fluoride(as F)	0.00
Aluminum(as Al)	0.00100	Nitrate(as NO <sub>3</sub> )	0.00
Manganese(as Mn)	0.0120	Boron(as B)	0.590
Zinc(as Zn)	0.285		
Lead(as Pb)	0.00		
		PARAMETERS	
Temperature(UF)	60.00	Sample pH	7.50
Conductivity	2536	Sp.Gr.(g/mL)	1.00
Resistivity	394.30	T.D.S.	1837

**IIIJACAM** 

Temp.	Press.	(	Calcite	An	hydrite	G	ypsum	ĺ	Barite	Ce	elestite	S	iderite	Mac	:kawenite	CO <sub>2</sub>	pCO <sub>2</sub>
(OF)	(atm)	(	CaCO <sub>3</sub>	0	CaSO <sub>4</sub>	CaSO	0 <sub>4</sub> *2H <sub>2</sub> O	E	BaSO <sub>4</sub>	5	irSO <sub>4</sub>	F	eCO <sub>3</sub>		FeS	(mpy)	(atm)
50.00	0.00	0.260	-0.501	0.00	-584.98	0.00	-487.40	0.00	-1,16	0.00	-58.51	0.410	-0.0353	0.00	-0.0713	0.0447	0.00431
65.45	0.00	0.317	-0.400	0.00	-586 <b>.</b> 45	0.00	-497.36	0.00	-1.42	0.00	-59.66	0.582	-0.0195	0.00	-0.0785	0.0837	0.00431
80.91	0.00	0.378	-0.318	0.00	-570.82	0.00	-501.92	0.00	-1.69	0.00	-59.02	0.789	-0.00778	0.00	-0.0854	0.0328	0.00431
96.36	0.00	0.441	-0.252	0.00	-541.21	0.00	-501.59	0.00	-1.95	0.00	-57.42	1.03	< 0.001	0.00	-0.0919	0.0422	0.00431
111.82	0.00	0.504	-0.199	0.00	-501,27	0.00	-478,43	0.00	-2.20	0.00	<b>-5</b> 5,46	1.29	0.00703	0.00	-0.0980	0.0371	0.00431
127.27	0.00	0.563	-0.157	0.00	-454.62	0.00	-443.08	0.00	-2.46	0.00	-53.69	1.57	0.0114	0.00	-0.105	0.0248	0.00431
142.73	0.00	0.619	-0.124	0.00	-404.58	0.00	-412.38	0.00	-2.75	0.00	-52.12	1.86	0.0145	0.00	-0.113	0.0148	0.00431
158.18	0.00	0.666	-0,0986	0.00	-353,90	0.00	-385.62	0.00	-3.05	0.00	-50.74	2.13	0.0165	0.00	-0.121	0.0102	0.00431
173.64	0.00	0.709	-0,0788	0.00	-304.73	0.00	-362.22	0.00	-3.38	0.00	-49.53	2,38	0.0176	0.00	-0.131	0.00566	0.00431
189.09	0.00	0.746	-0.0636	0.00	-258.59	0.00	-341.68	0.00	-3.72	0.00	-48.46	2.59	0.0180	0.00	-0.141	0.00998	0.00431
204.55	0.00	0.777	-0.0520	0.00	-216.44	0,00	-323.63	0.00	-4.09	0.00	-47.54	2.76	0.0178	0.00	-0.152	0.00836	0.00431
220.00	0.171	0.797	-0.0449	0.00	-180.13	0.00	-309.97	0.00	-4.52	0.00	-47.06	2.86	0.0172	0.00	-0.164	0.0114	0.00504
			Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		
		xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000		
			Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. {Ca}{CO<sub>3</sub>}/K<sub>Sp</sub>. pCO<sub>2</sub> (atm) is the partial pressure of CO<sub>2</sub> in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.



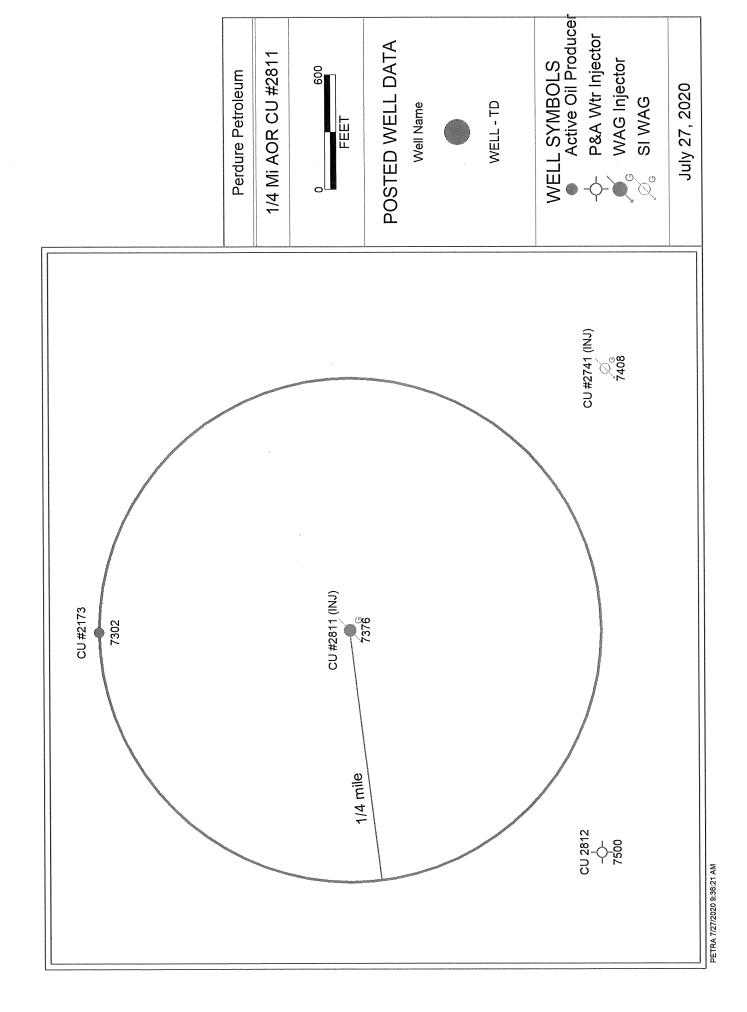


	Jacam Camrick Injection	on Water Analysis	
Company Name	PERDURE PETROLEUM LLC	PERDURE PETROLEUM LLC	PERDURE PETROLEUM LLC
Well Name	CU 3233	CU 2872	CU 3213
Area	OKLAHOMA	OKLAHOMA	OKLAHOMA
Sufrace Legal	1980' FSL 2590' FWL 1N 20E 32 E2E2 NE NW	660' FSL 660' FWL 1/4 Sec 1N 20E 28 C SW SE	1090' FSL 1090' FWL 1/4 Sec 1N 20E 32 SW NE
SAMPLEDATE	5/26/2020	5/20/2020	5/20/2020
SAMPLELOCATION	INJECTION WELL	INJECTION WELL	INJECTION WELL
AnalysisName	DSAT Analysis	DSAT Analysis	DSAT Analysis
TEMPERATURE	80	80	65
SPECIFIC GRAVITY	1.1	1,09	1.09
CALCULATED T.D.S.	160702.92	144407.03	142292.89
MOLAR CONDUCTIVITY	175227.09	158651.47	126499.99
RESISTIVITY (OHM CM) AT 25° C	5.71	6.3	7.91
CARBON DIOXIDE PARTIAL PRESSURE (PCO2 ATM)	0,34	0,19	0.19
HYDROGEN SULFIDE PARTIAL PRESSURE (PH2S ATM)	0 .	0	0
PH	5.9	6,1	6
IRON MG-L	61,45	64,48	53,72
FIELD FE	0	0	. 0
MANGANESE MG-L	2.689	2,388	2.536
CALCIUM MG-L	4567	4131	4154
MAGNESIUM MG-L	1193	1056	1084
SODIUM	51233,88	46755,28	45929.96
POTASSIUM MG-L	232.4	188.5	193,4
BARIUM MG-L	0,68	0.78	0,79
STRONTIUM MG-L	210.7	219.3	224.7
BICARBONATE MG-L	976	683	610
SULFATE MG-L	1125	1025	875
CHLORIDE MG-L	90600	81800	80800
BORON MG-L	19.47	20,15	20.21
LITHIUM MG-L	4,59	4.02	4.16
AMMONIA	0	0	0
ZINC MG-L	0.22	1,49	0.54
LEAD	0	0	0.54
BROMINE	0	0	0
CARBONATE	0	0	
SILICA	0		0
PHOSPHATE	0	0	0
NITRATE	0	0	0
DISSOLVED CARBON DIOXIDE	760	0	0
HYDROGEN SULFIDE MG-L	0	690	920
DISSOLVED O2 (PPM)	. 0	0.5	2
OIL CARRYOVER	U	0	0
CALCITE SL (CACO3)	1,83	1,84	0.99
CALCITE ME (CACO3)  CALCIUM PHOSPHATE SL	0.02	0,02	0
	0	0 .	0
CALCIUM PHOSPHATE ME		0	0
. MAGNESITE SL (MGCO3)	0,54	0,52	0.25
MAGNESITE ME (MGCO3)	-0.03	-0.04	-0.07
MAGNESIUM SILICATE SL	0	0	0 .
MAGNESIUM SILICATE ME	-97,81	-100.52	-92.22
ANHYDRITE SL (CASO4)	0,46	0.4	0,35
ANHYDRITE ME (CASO4)	-217.54	-280.15	-305.29
GYPSUM SL (CASO42H2O)	0.62	0.54	0.51
GYPSUM ME (CASO42H2O)	-135,21	-182.14	-183,54
BARITE SL (BASO4)	2.48	3,01	3,94
BARITE ME (BASO4)	0.26	0.34	0.38
CELESTITE SL (SRSO4)	0.63	0.69	0.65
CELESTITE ME (SRSO4)	-54.82	-42,96	-50.44
FLUORITE SL (CAF2)	0	0	0
FLUORITE ME (CAF2)	-3,42	-3.78	-3.57
SILICA ME (SIO2)	-33.09	-34.27	-27.82
. BRUCITE SL (MG(OH)2)	0	0	0
BRUCITE ME (MG(OH)2)	0	0	0
IRON HYDROXIDE SL (FE(OH)3)	0.52	0	0
IRON HYDROXIDE ME (FE(OH)3)	0	0	0
IRON SULFIDE SL (FES)	0	0.21	0.4
IRON SULFIDE ME (FES)	-0.27	-0.13	-0.14
STRENGITE SL (FEPO42H2O)	0	0	0
STRENGITE ME (FEPO42H2O)	0	0	0
HYDROXYAPATITE SL	0	0	0
HYDROXYAPATITE ME	-313.8	-327.23	-301.5
SIDERITE SL (FECO3)	17.94	23,41	9,45
SIDERITE ME (FECO3)	0.04	0.05	0,03
HALITE SL (NACL)	0,1	0.08	0.08

HALITE ME (NACL)	-111957,36	-122692,15	-119168.48
THENARDITE SL (NA2SO4)	0	0	0
THENARDITE ME (NA2SO4)	-82972.83	-82110.39	-81758.32

David Withten

David Witcher Jacam Chemicals

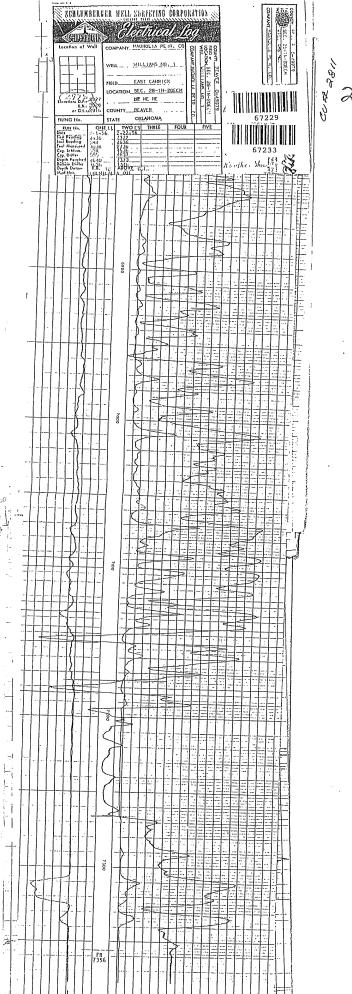


### OKLAHOMA CORPORATION COMMISSION

Oil & Gas Conservation Division Post Office Box 52000

ORIGINAL AMENDED (Reason) Ad	ld Fresh Wa	ter, Cha	nge Inj Press	ure &		Oklahoma Cil Ate COMP			2000						
TYPE OF DRILLING OPERATION	<u>N</u>		_	ls.		D. 175			1			640 A	cres		
SERVICE WELL  If directional or horizontal, see re	DIRECTIONAL HO		HORIZONTAL HOLE	D		FINISHED	<u>10-56</u> 2-24-5	 56							
COUNTY Beaver	SEC		01N <sup>RGE</sup> 20E	= D		OF WELL	3-2-5				_				$\perp$
LEASE NAME Camrick UI	· · · · · · · · · · · · · · · · · · ·		WELL			OD DATE									$\perp$
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ELEVATION 2927 Groun	<sup>1d</sup> 2916	Latitude (if kn		000	Lo (if	ongitude known)	3-14-0	1/						_	4-1
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ADDRESS 1101Centr	al Express	vay Sou	uth, Suite 15	 i0							_	$\vdash$	$\dashv$		+-
<sup>сітү</sup> Allen			STATE T			ZIP	7501	3			Щ,	OCATE	WEI		
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χ SINGLE ZONE			TYPE	SIZ	E	WEIGHT	GRADE		FEET		PSI	SA	\X	TOP OF	CMT
MULTIPLE ZONE Application Date			CONDUCTOR												
COMMINGLED Application Date			SURFACE	13 3	3/8	48		58	0			64	0		
LOCATION EXCEPTION ORDER NO			INTERMEDIATE	8 5/	/8	32		46	37			350	)		
INCREASED DENSITY ORDER NO			PRODUCTION	5 1	/2	15 1/2-1	7	737	6					58	40
			LINER					<u> </u>							
PACKER @ 7167 BRAN	ND & TYPE AS1	X	PLUG @	т	YPE_		PLUG @	<b></b>	TYPE			TOTAL DEPTH		7376	3
	ID & TYPE	FORMATION	_PLUG@	Т	YPE_		PLUG @		TYPE		-				
COMPLETION & TEST DATA	A BY PRODUCING	FORMATIO	N T				<del>- T</del> -			·		Т			
FORMATION	Upper Mo	orrow													
SPACING & SPACING ORDER NUMBER	654319,								*****						
CLASS: Oil, Gas, Dry, Inj, Dlsp, Comm Disp, Svc	INJ 5344	35									•			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
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(Fluids/Prop Amounts)				l											
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		Min Gas Allo	wapie (165	:10-17-7	)			Purchaser, Sales Date			,**********				
INITIAL TEST DATA		Oll Allowabl	2 (165:10-13-3)	)											
INITIAL TEST DATE	INJ Wel	<u> </u>								ļ					
OIL-BBL/DAY															
OIL-GRAVITY ( API)													-		
GAS-MCF/DAY															
GAS-OIL RATIO CU FT/BBL															
WATER-BBL/DAY															
PUMPING OR FLOWING															
INITIAL SHUT-IN PRESSURE														***************************************	
CHOKE SIZE					***************************************										
FLOW TUBING PRESSURE		(Barrier of Art - International)					1								
A record of the formations drill	led ihrough, and ped	nent remarks	are presented on the	reverse	Idac	lare that I ha	vo knowlet	age of the c	ontents of	this rapui	t and am	aulhona	od by	my argan	ization
to make this report, which was		inder my supe	Vickie Se	exton	l	nd facts state		o pe true, c	orrect, and	Complete	to the po	1	06-	672-	1029
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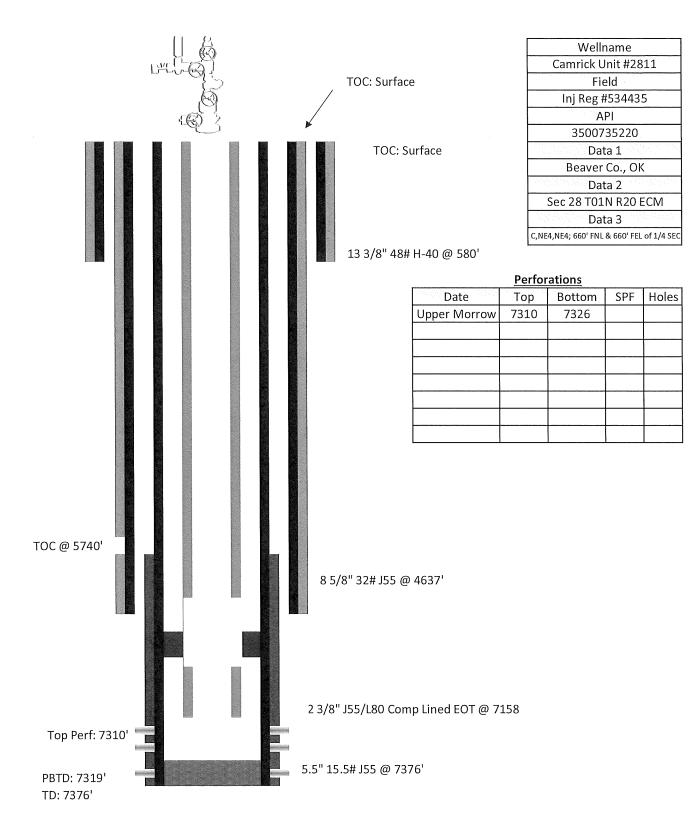
PLEASE TYPE OR USE BLACK INK ONLY FORMATION RECORD Camrick Unit Give formation names and tops, if available, or descriptions and thickness of formations drilled through. Show intervals cored or drillstem tested. LEASE NAME WELL NO NAMES OF FORMATIONS TOP FOR COMMISSION USE ONLY ITD on file YES ОИ Previously Reported APPROVED DISAPPROVED 2) Reject Codes \_\_\_\_yes \_X\_no Were open hole logs run? Date Last log was run Was CO₂ encountered? yes X no at what depths? Was H₂S encountered? X no at what depths? Were unusual drilling circumstances encountered? If yes, briefly explain below Other remarks: This is permitted for C02 and Saltwater. We want to adjust the permit to add fresh water. BOTTOM HOLE LOCATION FOR DIRECTIONAL HOLE 640 Acres COUNTY SEC TWE RGE Spot Location Feet From 1/4 Sec Lines FWL 1/4 Measured Total Depth True Vertical Depth BHL From Lease, Unit, or Property Line: BOTTOM HOLE LOCATION FOR HORIZONTAL HOLE: (LATERALS) LATERAL #1 Spot Location Feel From 1/4 Sec Lines FSL FWL 1/4 1/4 Depth of Radius of Turn Tolal If more than three drainholes are proposed, altach a Deviation Measured Total Depth Length True Vertical Depth BHL From Lease, Unit, or Property Line: separate sheet indicating the necessary information Direction must be stated in degrees azimuth. Please note, the horizontal drainhole and its end point must be located within the boundaries of the COUNTY SEC TWP RGE lease or spacing unit Directional surveys are required for all Spot Location 1/4 Feet From 1/4 Sec Lines FSL FWL drainholes and directional wells 1/4 1/4 1/4 Depth of Radius of Turn 640 Acres Total Deviation Measured Total Depth Length BHL From Lease, Unit, or Property Line: True Venical Depth LATERAL #3 COUNTY RGE FSL FWL Feet From 1/4 Sec Lines Radius of Turn Depth of Total Direction Deviation Measured Total Depth Length BHL From Lease, Unit, or Property Line: True Vertical Depth



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#Jell 2811



General Information										
Wellname	Camrick Unit #2811									
Field	Inj Reg #534435									
API	3500735220									

Casing	Size/Weight/Grade/OH Size	Тор	Bottom	Cement	TOC
<u>Surface</u>	13 3/8" 48# H-40	0	580	640	. 0
<u>Intermediate</u>	8 5/8" 32# J55	. 0	4637	350	0
Production	5.5" 15.5# J55	0	7376	250	5740
<u>Production</u>					
<u>Liner</u>					
<u>Open Hole</u>					

Tubing	Size/Weight/Grade	Тор	Bottom	T.A. Depth	Pckr Depth
Tubing	2 3/8" J55/L80 Comp Lined	0	7158		7167

Equipment	Description	Depth
Packer	AS1 Packer	7167

Leaks/Tight Spots	Description	Depth

<u>Perforations</u>				
Date	Top	Bottom	SPF	Holes
Upper Morrow	7310	7326		
			'	

<u>Rods</u>				
Taper	Size	Rod#	Depth	Holes
		***************************************		

<u>Notes</u>		
1/10/1956: Spud Well		
3/21/1956: Completion Date		
6/14/2007: Correct Spot Call		
Lat: 36.526448 / Long: -100.9048		