Initial

Application

Part I

Received: 6/23/22

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505 FORM C-108 Revised June 10, 2003

<u>APPLICATION FOR AUTHORIZATION TO INJECT</u>

I.		Secondary Recovery ies for administrative approval?	Pressure Maintenance Yes	x _No	Disposal	Storage
II.	OPERATOR:E	Induring Resources, LLC.	-		SWD-250	0
	ADDRESS:6	300 South Syracuse Way, Suite #525		_		
	CONTACT PART	TY: _Khem Suthiwan		_PHONE:	_(303) 350-5721	
III.		omplete the data required on the reverse side		ell proposed	for injection.	
IV.	Is this an expansion If yes, give the Di	on of an existing project? Yes	sxNo :			
V.		identifies all wells and leases within two m n proposed injection well. This circle identi			rith a one-half mile r	radius circle
VI.	data shall include	n of data on all wells of public record within a description of each well's type, construction all illustrating all plugging detail.				
VII.	Attach data on the	proposed operation, including:				
	 Whether the sy Proposed aver Sources and an produced wate If injection is 	age and maximum daily rate and volume of system is open or closed; age and maximum injection pressure; appropriate analysis of injection fluid and er; and, for disposal purposes into a zone not producysis of the disposal zone formation water (not product the d	compatibility with the re	thin one mi	le of the proposed w	vell, attach a
*VIII.	Give the geologic dissolved solids of	e geologic data on the injection zone include name, and depth to bottom of all undergrooncentrations of 10,000 mg/l or less) overly nderlying the injection interval.	und sources of drinking v	vater (aquif	ers containing water	s with total
IX.	Describe the prope	osed stimulation program, if any.				
*X.	Attach appropriate	e logging and test data on the well. (If well	logs have been filed with	the Divisio	on, they need not be	resubmitted).
*XI.		analysis of fresh water from two or more fr al well showing location of wells and dates		ble and pro	ducing) within one r	mile of any
XII.		sposal wells must make an affirmative states nce of open faults or any other hydrologic of				
XIII.	Applicants must c	omplete the "Proof of Notice" section on th	e reverse side of this forn	1.		
XIV.	Certification: I her belief.	eby certify that the information submitted w	ith this application is true	e and correc	t to the best of my ki	nowledge and
	NAME: _Khem S	uthiwanTITL	E:Regulatory Manage	r		
	SIGNATURE:	Khem Suthiwan		DATE:	6/21/2022	
*	If the information	SS: _KSuthiwan@enduringresources.com_ required under Sections VI, VIII, X, and XI tte and circumstances of the earlier submitta				ubmitted.

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: _Endurin	g Resources, LLC				
WELL NAME & NUM	BER: _Warner Caldwell 3B				
WELL LOCATION: _	384 FNL 1960 FELFOOTAGE LOCATION	BB UNIT LETTER	08 SECTION	23N TOWNSHIP	08W_ RANGE
<u>WELL1</u>	BORE SCHEMATIC		WELL Co	ONSTRUCTION DATE Casing	<u>4</u>
		Hole Size: 12 1/4"		Casing Size: 9 5/8"_	
See attached Wellb	ore Diagram	Cemented with: 101 sx.		or	ft ³
		Top of Cement: Surface_		Method Determined	: Circ to Surface_
			Intermedia	te Casing	
		Hole Size:		Casing Size:	
		Cemented with:	SX.	or	ft ³
		Top of Cement:		Method Determined	:
			Production	n Casing	
		Hole Size: 7 7/8"		Casing Size: 5 ½"	
		Cemented with: _900_ sx.		or	ft ³
		Top of Cement: Surface		Method Determined	: Circ to Surface
		Total Depth:			
			Injection	Interval	
		3975	fee	t to4134'	Perforated

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

. .	Lea Carria - Dantha 2000?
ac	ker Setting Depth:3900'
)th	er Type of Tubing/Casing Seal (if applicable):N/A
	Additional Data
	Is this a new well drilled for injection?YesxNo
	If no, for what purpose was the well originally drilled?Gas/Oil producer in the Gallup formation
	Name of the Injection Formation:Point Lookout
	Name of the Injection Formation:Point Lookout

Directions from the Intersection of Highway 550 and Highway 64 in Bloomfield, NM

to

LOGOS OPERATING, LLC WARNER-CALDWELL #3B 384' FNL 1960' FEL, Section 8, T23N, R8W, N.M.P.M., San Juan County,

New Mexico

Latitude: 36° 14' 52.54" N Longitude: 107° 42' 08.64" W

Nad 1983

From the Intersection of Highway 550 & Highway 64
Go South on Hwy 550 for 39.3 miles,
To 44 store,
turn left (northerly) for 300 feet
just past 44 store parking lot,
to the beginning of new access
on the right (east) side of the road,
From which the new access begins and
continues (easterly) for 0.2 miles
stay left (northerly) for 0.3 miles
to the new location.

DISTRICT I
1635 N. French Dr., Hobbs, N.M. 88340
Phones: (676) 393-6161 Fax: (576) 393-0720
DISTRICT II
811 S. First St., Artesia, N.M. 65210
Phones: (676) 743-1283 Fax: (676) 748-9720
DISTRICT III
1000 Rob Bresco Rd., Asteo, N.M. 67410
Phone: (505) 334-6179 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fa, NM 67605
Phone: (506) 476-3460 Fax: (506) 476-3462

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

Form C-102

Revised August 1, 2011

to appropriate
District Office

1220 South St. Francis Dr. Santa Fe, NM 87505

JAN 14 2014

Farmington Field Office AMENDED REPORT Bureau of Land Management

WELL LOCATION AND ACREAGE DEDICATION PLAT

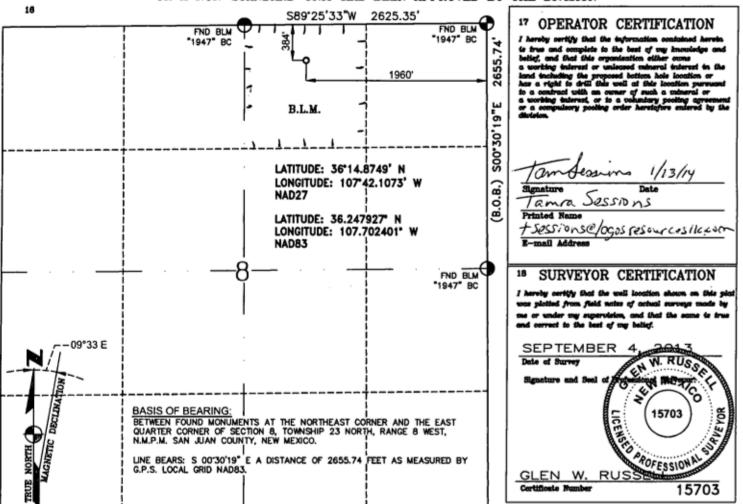
30-045-3	5506	47540		Pool Name NAGEEZI G	-						
⁴ Property Code		*Pro	• Well Number								
40413		WARNER	WARNER -CALDWELL								
OGRID No.		*Ope		Elevation							
289408		LOGOS OF	PERATING, LLC				6867'				
		10 Surf	ace Location								
III. or let no Section	Township 1	Banna Int Ida Part Assau	the Worth /Courth New	Post Assem the	Part /Far	4 34	G				

UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County
B 8 23-N 8-W 384 NORTH 1960 EAST SAN JUAN

"Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township		Lot Idn		North/South line		East/West line	County
Dedicated Acre	^		"Joint or	hfill	4 Consolidation (Code	¹⁸ Order No.		

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



Directions from the Intersection of Highway 550 and Highway 64 in Bloomfield, NM

to

LOGOS OPERATING, LLC WARNER-CALDWELL #3B 384' FNL 1960' FEL, Section 8, T23N, R8W, N.M.P.M., San Juan County,

New Mexico

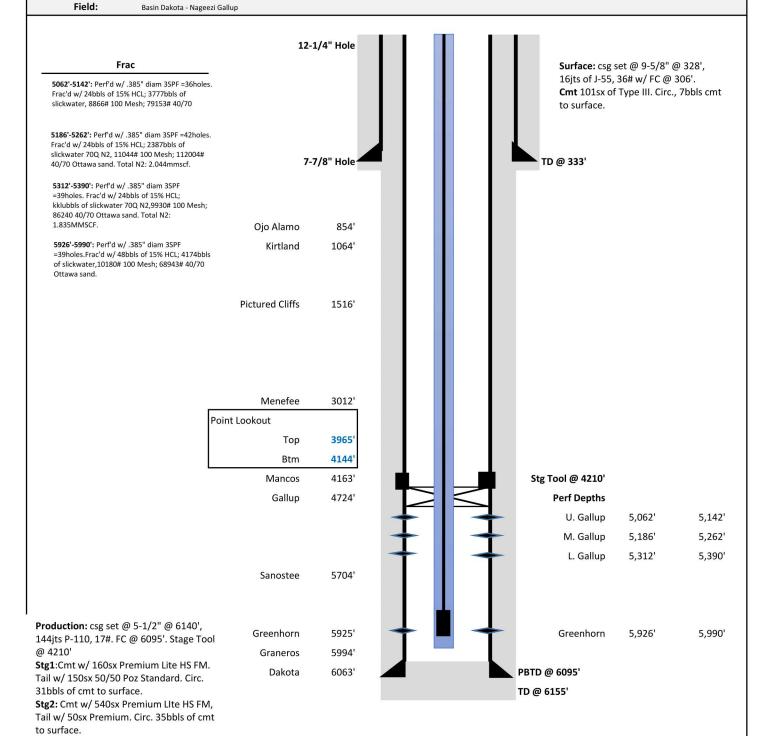
Latitude: 36° 14' 52.54" N Longitude: 107° 42' 08.64" W

Nad 1983

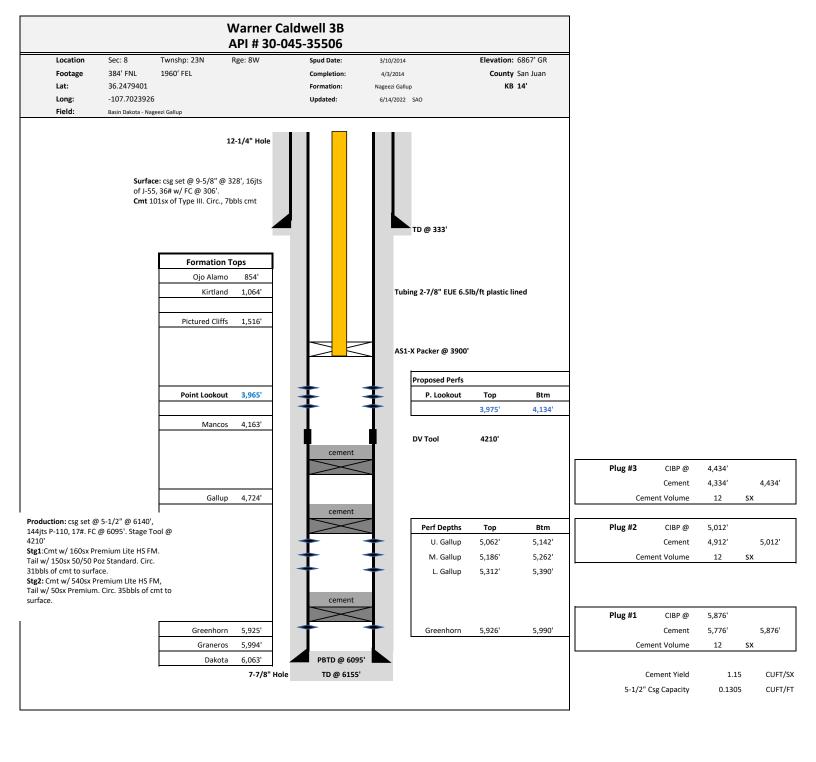
From the Intersection of Highway 550 & Highway 64
Go South on Hwy 550 for 39.3 miles,
To 44 store,
turn left (northerly) for 300 feet
just past 44 store parking lot,
to the beginning of new access
on the right (east) side of the road,
From which the new access begins and
continues (easterly) for 0.2 miles
stay left (northerly) for 0.3 miles
to the new location.

Warner Caldwell 3B API # 30-045-35506

Location Sec: 8 Twnshp: 23N Rge: 8W Spud Date: 3/10/2014 Elevation: 6867' GR 384' FNL 1960' FEL Completion: **Footage** 4/3/2014 County San Juan 36.2479401 **KB 14'** Lat: Formation: Nageezi Gallup Long: -107.7023926 Updated: 6/13/2022 SAO



Tubing	OD	ID	Lngth (ft)	Btm Dpth (ft)	Rods
Tbg hanger	2-7/8"	2.441"			1 - 1/2" X 26' Polish Rod
154 jts 2-7/8", 6.5#, J-55 EUE Tbg	2-7/8"	2.441"			2' X 3/4" Pony Rod
1 - tbg anchor		2.441"		5005'	227 - 3/4" Slick Rods
30 jts 2-7/8", 6.5#, J-55 EUE Tbg	2-7/8"	2.441"			8 - 1-1/4" Sinker Bars
SN	2-7/8"	2.280"		5995	2 - 4' Rods Guides
1 - 8' pup jt	2-7/8"	2.441"			2 - 1/2" X 1-1/2" X 16' RWAC HVR Insert pump
1 - 4' perf sub	2-7/8"	2.441"			
2 jts 2-7/8" tbg w/ BP	2-7/8"	2.441"		6066'	



	I	Walls located within 1	/2 mile radio	ıs of n	roposed SWD well (Warner Ca	ldwall 0	1201							
Count	API	Name	Type Code				County	ULSTR	Footage	Plug Date	Point Lookout Penetration	Snud Date	Measured Denth	True Vertical Depth
					Temporary Abandonment		San Juan	A-08-23N-08W	348 FNL 331 FEL	N/A	Yes, Proposed Well	3/19/2014		6125
			0		Active			B-08-23N-08W	384 FNL 1960 FEL	N/A	Yes, Proposed Well	3/10/2014		6095
	30-045-35422				Active				1662 FNL 1973 FEL	N/A	Yes, Active	2/6/2013		6175
			0	Oil	Active			A-08-23N-08W		N/A	Yes, Active	3/10/2015		10388
		Wells located within	2 mile radius	s of pro	oposed SWD well (Warner Cal	dwell 00	3B)							
Count	API		Type Code			OGRID		ULSTR	Footage		Point Lookout Penetration			True Vertical Depth
					Active				836 FSL 461 FEL	N/A	Yes, Active	2/18/2016	12488	486
			-	Oil	Plugged (site released)		San Juan	P-12-23N-09W	660 FSL 660 FEL		No, Plugged Site Released	8/16/1972	0	1174
				_	Active			P-12-23N-09W	844 FSL 442 FEL	N/A	Yes, Active	2/17/2016	13507	491
					Active			P-12-23N-09W	877 FSL 366 FEL	N/A	Yes, Active	2/17/2016		499
				Oil	Active		San Juan	P-12-23N-09W	828 FSL 480 FEL	N/A	Yes, Active	2/19/2016		488
				Oil	Active		San Juan	P-12-23N-09W	869 FSL 385 FEL	N/A	Yes, Active	2/18/2016		490
		TV ETBILOOK OTHER HYDOR		Oil	Active			P-12-23N-09W	860 FSL 404 FEL	N/A N/A	Yes, Active	2/19/2016		492 509
		W LYBROOK UNIT #705H W LYBROOK UNIT #745H		Oil	Active Active		San Juan San Juan	O-07-23N-08W O-07-23N-08W	1344 FSL 2233 FEL 1333 FSL 2250 FEL	N/A N/A	Yes, Active	3/16/2017 3/15/2017	15002	509
				Oil	Active			O-07-23N-08W	1311 FSL 2284 FEL	N/A N/A	Yes, Active Yes, Active	3/15/2017		499
				Gas	Active			L-32-24N-08W	1900 FSL 2264 FEL	N/A	Yes, Active	9/24/2014		499
12				Gas	Active		San Juan	M-32-24N-08W	414 FSL 60 FWL	N/A	Yes, Active	10/7/2014		
13		CHACO 2308 06I #397H		Oil	Active		San Juan	I-06-23N-08W	2100 FSL 325 FEL	N/A	Yes, Active	3/21/2015		1036
14				Oil	Plugged (site released)	371838		M-32-24N-08W	950 FSL 980 FWL	6/13/2018		7/20/1980		543
	30-045-35809			Oil	Active		San Juan	N-08-23N-08W	1205 FSL 1327 FWL	N/A	Yes. Active	12/15/2016		519
	30-045-35520		-	Gas	Active	0.660	San Juan	E-32-24N-08W	1337 FNL 284 FWL	N/A	Yes, Active	12/4/2014	10520	1050
	30-045-35554			Oil	Active			H-06-23N-08W	1737 FNL 276 FEL	N/A	Yes, Active	8/21/2014		1063
					Active			D-32-24N-08W	1308 FNL 282 FWL	N/A	Yes, Active	11/21/2014		
	30-045-24201			Oil	Plugged (site released)		San Juan	C-05-23N-08W	790 FNL 1650 FWL		Yes, Active	3/16/1980		6405
	30-045-24213	FEDERAL 6 #041		Oil	Plugged (site released)		San Juan	A-06-23N-08W	990 FNL 830 FEL		Yes, Active	2/28/1980	99999	6440
					Active			M-08-23N-08W	1199 FSL 1287 FW	N/A	Yes, Active	12/9/2016		5075
				Oil	Active		San Juan	N-08-23N-08W	1212 FSL 1366 FWL	N/A	Yes, Active	12/6/2016		5189
23	30-045-35808	W LYBROOK UNIT #713H	0	Oil	Active	372286	San Juan	N-08-23N-08W	1215 FSL 1386	N/A	Yes, Active	12/14/2016		5203
24	30-045-35553	CHACO 2308 06H #395H	0	Oil	Active			H-06-23N-08W	1687 FNL 291 FEL	N/A	Yes, Active	8/20/2014		1055
			0	Oil	Plugged (site released)			G-32-24N-08W	1650 FNL 1650 FEL	11/8/2018	Yes, Active	5/11/1981	5700	5700
26	30-045-35730	W LYBROOK UNIT #744H	0	Oil	Active		San Juan	M-08-23N-08W	1202 FSL 1307 FWL	N/A	Yes, Active	12/8/2016	10580	5104
27	30-045-35912	KTB 2408 32A COM #002H	0	Oil	Active	289408	San Juan	A-32-24N-08W	1205 FNL 360 FEL	N/A	Yes, Active	5/14/2019	11465	5519
28	30-045-35491	CHACO 2408 32P #115H	0	Oil	Active	372286	San Juan	P-32-24N-08W	537 FSL 329 FEL	N/A	Yes, Active	9/30/2013	10541	10415
29	30-045-35729	W LYBROOK UNIT #743H	0	Oil	Active	372286	San Juan	N-08-23N-08W	1209 FSL 1346 FWL	N/A	Yes, Active	12/7/2016	9816	5124
30	30-045-23524	NEW MEXICO STATE #001	0	Oil	Plugged (site released)	371838	San Juan	O-32-24N-08W	790 FSL 1750 FEL	12/2/2015	Yes, Active	5/16/1979	6521	6521
31	30-045-35605	MC 5 COM #112H	0	Oil	Active	372286	San Juan	D-33-24N-08W	1276 FNL 405 FWL	N/A	Yes, Active	12/9/2014	13156	5570
	30-045-35505		0	Oil	Temporary Abandonment			A-08-23N-08W	348 FNL 331 FEL	N/A	Yes, Active	3/19/2014		6125
33		KTB 2408 32A COM #003H	0	Oil	Active		San Juan	A-32-24N-08W	1232 FNL 374 FEL	N/A	Yes, Active	5/15/2019		5502
	30-045-35506		0	Oil	Active	372286	San Juan	B-08-23N-08W	384 FNL 1960 FEL	N/A	No, Plugged Site Released	3/10/2014	6155	6095
				Gas	Active			G-08-23N-08W	1662 FNL 1973 FEL	N/A	Yes, Active	2/6/2013	6230	6175
				Oil	Active			D-04-23N-08W	484 FNL 755 FWL	N/A	Yes, Active	1/14/2015	10685	10602
		MC 5 COM #113H			Active			D-33-24N-08W	1304 FNL 372 FWL	N/A	Yes, Active	11/17/2014		553:
	30-045-35687	HEROS 2308 09L COM #002H		Oil	Active			L-09-23N-08W	1476 FSL 240 FWL	N/A	Yes, Active	4/25/2018		5290
	30-045-35606	MC 5 COM #906H		Oil	Active		San Juan	D-33-24N-08W	1262 FNL 422 FWL	N/A	Yes, Active	12/11/2014		5346
40				Oil	Active	289408		L-09-23N-08W	1476 FSL 270 FWL	N/A	Yes, Active	4/26/2018		526
	30-045-35441	CHACO 2408 32P #114H		Oil	Active	372286		P-32-24N-08W	1203 FSL 382 FEL	N/A	Yes, Active	1/4/2013		1031
		HEROS 2308 09L COM #005H		Oil	Active		San Juan	L-09-23N-08W	1476 FSL 330 FWL	N/A	Yes, Active	6/6/2018		525
	30-045-35847			Oil	Active		San Juan	L-09-23N-08W	1476 FSL 300 FWL	N/A	Yes, Active	5/4/2018		5227
		FEDERAL F #001			Plugged (site released)			J-08-23N-08W	2080 FSL 1960 FEL	8/15/2000		10/5/1971	5291	5291
				Oil	Active			L-04-23N-08W	2431 FSL 405 FWL	N/A	Yes, Active	2/5/2015		10359
46	30-045-35627		0	Oil	Active		San Juan	L-04-23N-08W	2431 FSL 427 FWL 2431 FSL 383 FWL	N/A	Yes, Active	2/3/2015		10454
				Oil	Active		San Juan	L-04-23N-08W		N/A	Yes, Active	2/9/2015		10299
	30-045-35643 30-045-35688		-		Active		San Juan	A-08-23N-08W	328 FNL 334 FEL 1476 FSL 210 FWL	N/A N/A	Yes, Active	3/10/2015 1/21/2017	10437	10388
	30-045-35688	MC 5 COM #119H		Oil	Active Active		San Juan San Juan	L-09-23N-08W D-33-24N-08W	1290 FNL 388 FWL	N/A N/A	Yes, Active Yes, Active	1/21/201/		5186
				Oil	Active			D-04-23N-08W	480 FNL 777 FWL	N/A	Yes, Active	1/7/2014		1053
	30-045-35616		-	Oil	Active				371 FSL 693 FWL	N/A N/A	,	-,-,		5314
52		W LYBROOK UNIT #702H W LYBROOK UNIT #701H		Oil	Active		San Juan	M-09-23N-08W M-09-23N-08W	393 FSL 728 FWL	N/A	Yes, Active Yes, Active	2/9/2017		
54				Oil	Active		San Juan	A-32-24N-08W	1179 FNL 346 FEL	N/A	No, Active	5/13/2019		3330
	30-045-33911			Oil	Plugged (site released)	214263		F-16-23N-08W	1980 FNL 1980 FWL	6/14/1957		5/27/1957	0	
	30-045-33696	SOUTH BLANCO FEDERAL 33 #	0	Oil	Active		San Juan	1-33-24N-08W	1950 FSL 790 FWL	N/A	No. Active	11/3/2007	5926	5926
	30-045-35678		-	Oil	Plugged (site released)		San Juan	M-33-24N-08W	1087 FSL 428 FWL	,	No, Plugged Site Released	5/18/2015	3320	332
	30-045-24520		-	Oil	Active			B-09-23N-08W	850 FNL 1700 FEL	N/A	Yes, Active	10/14/1980		548
	30-045-24861	STATE OF NEW MEXICO 16 #0		Oil	Plugged (site released)			C-16-23N-08W	890 FNL 1920 FWL	11/10/2004		4/30/1981	5508	550
	30-045-35496			Oil	Active		San Juan	A-09-23N-08W	917 FNL 240 FEL	N/A	Yes, Active	12/16/2013		1048
	30-045-24519	FEDERAL 3 #023		Oil	Plugged (site released)		San Juan	K-03-23N-08W	1760 FSL 1785 FWL		Yes, Active	9/16/1980		540
	30-045-35587			Oil	Active			P-04-23N-08W	1323 FSL 208 FEL	N/A	Yes, Active	9/22/2014		1043
	30-045-35498		0	Oil	Active			A-09-23N-08W	932 FNL 204 FEL	N/A	Yes, Active	1/13/2014	10566	1049
	30-045-35538		-	Gas	Active		San Juan	L-03-23N-08W	2216 FSL 74 FWL	N/A	Yes, Active	7/8/2014		1032
	30-045-35539			Oil	Active		San Juan	L-03-23N-08W	2268 FSL 70 FWL	N/A	Yes, Active	6/26/2014		1050
	30-045-35677			-	Plugged (site released)			M-33-24N-08W	1086 FSL 450 FWL		No, Plugged Site Released	5/20/2015		30
	30-045-35495	CHACO 2308 04P #149H	0	Oil	Active		San Juan	P-04-23N-08W	1318 FSL 246 FEL	N/A	Yes, Active	1/20/2014		1054
67			0	Oil	Active	372286	San Juan	E-03-23N-08W	1906 FNL 817 FWL	N/A	Yes, Active	9/24/2014		1055
67	30-045-35588	CHACO 2308 03E #403H	0	Oil	Active	372200	Jan Juan	L-03-2314-0044	1300 1145 017 1 445	14/77	res, Active		10004	
68 69		CHACO 2308 04P #150H		_	Active	372286	San Juan	P-04-23N-08W P-04-23N-08W	1312 FSL 285 FEL	N/A	Yes, Active	1/22/2014	10521	1041

FW01W027

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W027

FARMINGTON LAB

GENERAL INFORMATION

OPERATOR:

DUGAN PRODUCTION

DEPTH:

WELL:

SANCHEZ O'BRIEN #1

DATE SAMPLED: 12/03/97

FIELD:

SEC.6/T24N/R9W

DATE RECEIVED: 12/03/97

SUBMITTED BY: JOHN ALEXANDER :D. SHEPHERD

COUNTY: SAN JUAN

STATE: NM

WORKED BY

FORMATION: MESAVERDE

PHONE NUMBER:

SAMPLE DESCRIPTION

SWAB SAMPLE AFTER 200 BBL.

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:

1.025 76°F PH: 7.23

RESISTIVITY (MEASURED): 0.160 ohms @ 76°F

IRON (FE++):

3 ppm

SULFATE:

0 ppm

CALCIUM:

336 ppm

TOTAL HARDNESS

1,074 ppm

MAGNESIUM:

BICARBONATE:

548 ppm

57 ppm

CHLORIDE:

22,137 ppm

SODIUM CHLORIDE(Calc)

36,415 ppm

SODIUM+POTASS:

14,065 ppm

TOT. DISSOLVED SOLIDS:

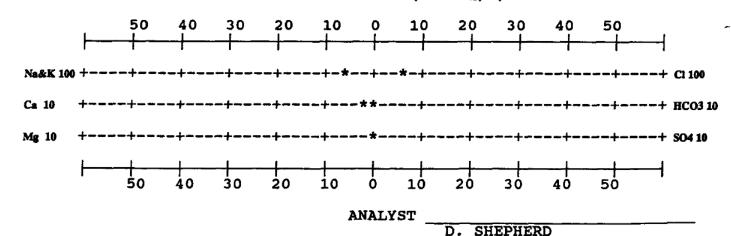
37,823 ppm

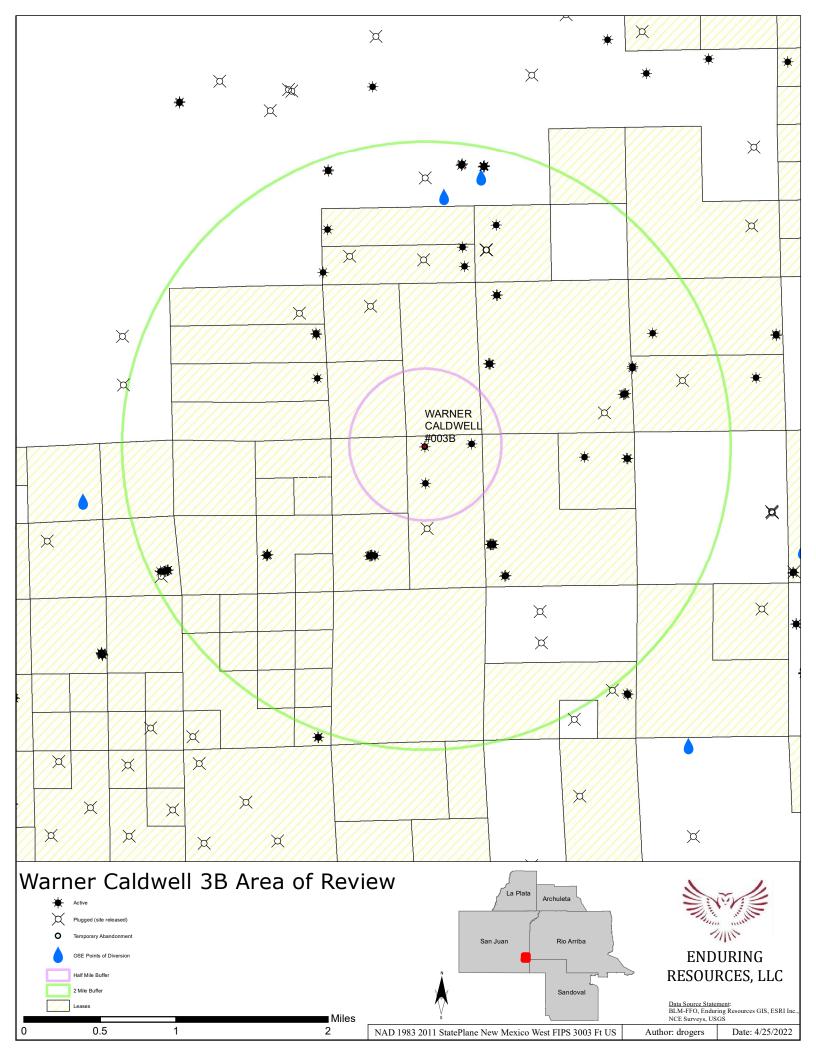
H2S: NO TRACE

POTASSIUM (PPM): 84

REMARKS

STIFF TYPE PLOT (IN MEQ/L)







U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Report

Well Name: WARNER-CALDWELL Well Location: T23N / R8W / SEC 8 / County or Parish/State: SAN

Well Number: 3B Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM109399 Unit or CA Name: Unit or CA Number:

US Well Number: 3004535506 **Well Status**: Producing Oil Well **Operator**: ENDURING

RESOURCES LLC

Notice of Intent

Sundry ID: 2677417

Type of Submission: Notice of Intent

Type of Action: Convert to Injection or Disposal Well

Date Sundry Submitted: 06/16/2022 Time Sundry Submitted: 02:12

Date proposed operation will begin: 07/16/2022

Procedure Description: Enduring Resources, LLC (Enduring) intends to complete the necessary downhole and surface work to convert the Warner Caldwell 3B to a saltwater disposal well. This wellbore was originally drilled, and fracture treated in the Gallup by Logos Operating in March of 2014. Enduring intends to pull the currently installed tubing and install an injection packer and poly lined tubing. A mechanical integrity test will be conducted prior to injection. An application for authorization to inject (form C-108) will be filed with the New Mexico Oil Conservation Division for the Warner Caldwell 3B. Procedure below outlines the planned downhole work to prepare the wellbore for MIT and ultimately produced water injection. All surface facility work will be limited to existing disturbance. See attached procedure.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Warner_Caldwell_3B___Disposal_Conversion_Procedure_20220616141155.pdf

Well Name: WARNER-CALDWELL Well Location: T23N / R8W / SEC 8 / County or Parish/State: SAN

NWNE / 36.247927 / -107.702401 JUAN / NM

Well Number: 3B Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM109399 Unit or CA Name: Unit or CA Number:

US Well Number: 3004535506 **Well Status:** Producing Oil Well **Operator:** ENDURING

RESOURCES LLC

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: KHEM SUTHIWAN Signed on: JUN 16, 2022 02:12 PM

Name: ENDURING RESOURCES LLC

Title: Regulatory Manager

Street Address: 6300 S WAY SUITE 525

City: DENVER State: CO

Phone: (303) 350-5721

Email address: KSUTHIWAN@ENDURINGRESOURCES.COM

Field

Representative Name:	
Otera et Aulalea e e e	

Street Address:

City: State: Zip:

Phone:

Email address:

WARNER CALDWELL #003B

30-045-35506 San Juan Co., NM 384' FNL, 1960' FEL, Sec. 8, T23N, R08W 36.2479401°N, 107.7023926°W CONVERSION TO SALTWATER DISPOSAL



PROCEDURE:

- 1. Hold PJSM prior to beginning any operations. Ensure all onsite personnel abide by Enduring HSE protocol.
- 2. Comply with all NMOCD and BLM safety and environmental regulations.
- 3. Conduct safety meeting with all personnel and MIRU rig
- 4. Blow down well to flowback tank. Kill well as required.
- 5. Pressure test 2-7/8" tbg. Unseat pump, TOOH w/ rods and pump.
- 6. ND WH. NU BOPE and test.
- 7. TOOH w/ 2-7/8" tubing while scanning, standing back yellow band, LD blue/green/red band.
- 8. TIH with 2-7/8" tbg and 5-1/2" casing scraper to 5900'. POOH. LD scraper.
- 9. TIH with 5-1/2" CIBP on 2-7/8" tubing & set CIBP @ 5876' (50' above Greenhorn perfs).
- 10. MIRU cementers. Pump 12sx cement above CIBP f/ 5876' t/ 5776'. TOOH.
- 11. TIH with 5-1/2" CIBP on 2-7/8" tubing & set CIBP @ 5012' (50' above Gallup perfs).
- 12. Pump 12sx cement above CIBP f/ 5012' t/ 4912. TOOH.
- 13. TIH with 5-1/2" CIBP on 2-7/8" tubing & set CIBP @ 4434'.
- 14. Pump 12sx cement above CIBP f/ 4434' t/ 4334' (200' below planned injection perfs). TOOH.
- 15. Pressure test 5-1/2" casing to 1,000 psi
- 16. Rig up perforators. TIH and perforate the Point Lookout f/ 4134' t/ 3975'. TOOH.
- 17. PU AS1-X packer and RIH with 2-7/8" tubing with sub, packer, on/off tool and land packer 50' above top Point Lookout perforation @ 3925'.
- 18. Set packer and test tubing/casing annulus to 500 psi for 10 minutes. Bleed casing pressure.
- 19. Rig up acidizing crew. Pump 1,500 gal 15% HCl. Flush tubing and release acid crew.
- 20. Pull out of on/off tool, and POOH laying down tubing.
- 21. PU and TIH with 2-7/8" plastic lined tubing to packer @ 3925' and function test on/off tool.
- 22. Pull out of on/off tool and displace wellbore with packer fluid.
- 23. Latch onto on/off tool and chart official MIT with NMOCD witness on-site (provide inspector with 24 hour notification prior to chart recording).
- 24. NDBOP, NUWH and set tree for injection.
- 25. Establish initial injection rate to ensure well is taking fluid using no more than 50 bbl.
- 26. RDMO



Brine Chemistry Evaluation

SYSTEM IDENTIFICATION

Company: Enduring Resources Lease/Unit: WLU 729H Sample Location: Separator Submitted By: Kenny Wood Sales Representative: Kenny Wood

Analyst: Lindsey Kelleher Lab Entry Date: 06-16-2022

Sample ID#: 0

ID: 220616007

Sample Date: 06-15-2022 at 0000 ☐ Ntp`·

Report Date: 06-20-2022

WATER CHEMISTRY

CATIONS

 Calcium(as Ca)
 367.45

 Magnesium(as Mg)
 93.45

 Barium(as Ba)
 11.72

 Strontium(as Sr)
 60.87

 Sodium(as Na)
 16753

 Iron(as Fe)
 13.86

 Manganese(as Mn)
 0.770

ANIONS

 $\begin{array}{lll} \text{Chloride(as Cl)} & 24269 \\ \text{Sulfate(as SO}_4) & 2850 \\ \text{Dissolved CO}_2(\text{as CO}_2) & 149.70 \\ \text{Bicarbonate(as HCO}_3) & 793.00 \\ \text{H}_2\text{S (as H}_2\text{S)} & 2.00 \\ \end{array}$

PARAMETERS

 Temperature(°F)
 80.00

 Sample pH
 7.50

 Conductivity
 60860

 T.D.S.
 45873

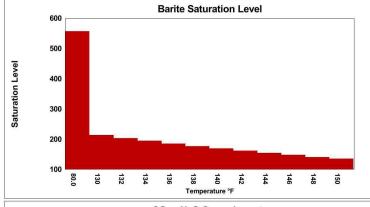
 Resistivity
 16.43

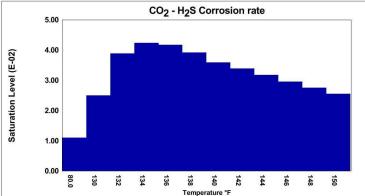
 Sp.Gr.(g/mL)
 1.03

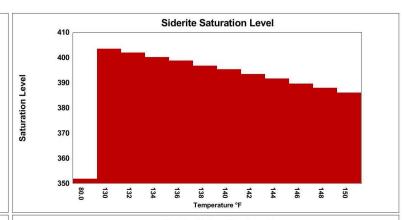
SCALE AND CORROSION POTENTIAL

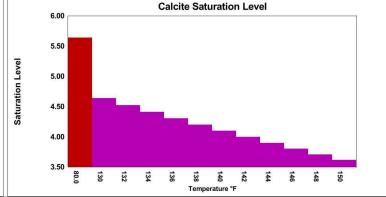
Temp.	Press.	Ca	lcite	Anh	nydrite	Gy	psum	В	arite	Cel	estite	Sic	lerite	Mack	awenite	CO ₂	CO ₂
(OF)	(psia)	Ca	CO ₃	Ca	3SO ₄	CaSO	4*2H ₂ O	Ba	SO ₄	Sr	SO ₄	Fe	CO3	F	eS	(mpy)	mole %
80.00	14.70	5.64	1.78	0.174	-822.48	0.269	-607.74	557.30	7.13	2.32	25.70	351.82	2.50	28.10	0.523	0.0110	0.388
130.00	50.00	4.64	1.04	0.239	-591.23	0.298	-527.45	213.48	7.11	2.46	26.76	403.48	1.53	9.62	0.458	0.0250	0.388
132.00	145.00	4.52	1.01	0.240	-585.61	0.298	-526.62	203.76	7.11	2.43	26.56	401.89	1.50	9.19	0.453	0.0388	0.388
134.00	240.00	4.41	0.988	0.242	-579.69	0.298	-525.88	194.53	7.10	2.41	26.36	400.17	1.48	8.78	0.447	0.0424	0.388
136.00	335.00	4.31	0.963	0.244	-573.56	0.297	-525.30	185.66	7.10	2.38	26.15	398.71	1.45	8.40	0.442	0.0418	0.388
138.00	430.00	4.20	0.937	0.246	-567.06	0.297	-524.75	177.31	7.10	2.35	25.94	396.70	1.42	8.02	0.437	0.0392	0.388
140.00	525.00	4.10	0.914	0.249	-560.32	0.297	-524.29	169.37	7.10	2.33	25.73	395.33	1.40	7.67	0.431	0.0359	0.388
142.00	620.00	4.00	0.889	0.251	-553.32	0.296	-523.93	161.81	7.10	2.30	25.51	393.43	1.37	7.33	0.426	0.0339	0.388
144.00	715.00	3.90	0.866	0.254	-546.08	0.296	-523.67	154.61	7.10	2.28	25.29	391.59	1.35	7.01	0.420	0.0318	0.388
146.00	810.00	3.80	0.842	0.257	-538.62	0.296	-523.51	147.77	7.09	2.25	25.07	389.62	1.32	6.70	0.414	0.0296	0.388
148.00	905.00	3.71	0.820	0.260	-530.96	0.295	-523.45	141.24	7.09	2.23	24.84	387.89	1.30	6.41	0.409	0.0275	0.388
150.00	1000.00	3.62	0.798	0.263	-523.10	0.294	-523.50	135.03	7.09	2.20	24.60	386.04	1.27	6.14	0.403	0.0256	0.388
			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}{CO₃}/K_{sp}. CO₂ (mole %) refers to CO₂ in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.











Brine Chemistry Evaluation

SYSTEM IDENTIFICATION

Company: Enduring Resources Lease/Unit: WLU 761H Sample Location: Separator Submitted By: Kenny Wood Sales Representative: Kenny Wood

Analyst: Lindsey Kelleher Lab Entry Date: 06-16-2022

Sample ID#: 0

ID: 220616006

Sample Date: 06-15-2022 at 0000 ☐ Ntp`.

Report Date: 06-20-2022

WATER CHEMISTRY

CATIONS

 Calcium(as Ca)
 225.14

 Magnesium(as Mg)
 64.25

 Barium(as Ba)
 13.89

 Strontium(as Sr)
 50.42

 Sodium(as Na)
 15455

 Iron(as Fe)
 26.79

 Manganese(as Mn)
 0.730

ANIONS

 $\begin{array}{lll} \text{Chloride(as Cl)} & 21842 \\ \text{Sulfate(as SO}_4) & 2850 \\ \text{Dissolved CO}_2(\text{as CO}_2) & 199.60 \\ \text{Bicarbonate(as HCO}_3) & 976.00 \\ \text{H}_2\text{S (as H}_2\text{S)} & 2.00 \\ \end{array}$

PARAMETERS

 Temperature(°F)
 80.00

 Sample pH
 7.50

 Conductivity
 55548

 T.D.S.
 42409

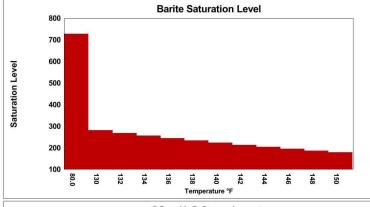
 Resistivity
 18.00

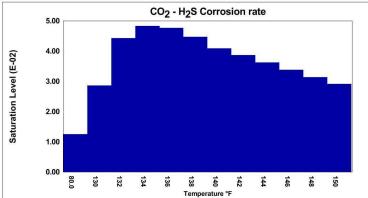
 Sp.Gr.(g/mL)
 1.02

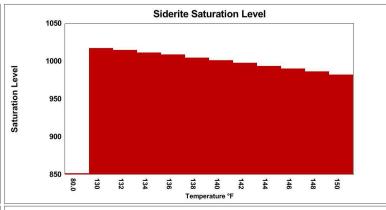
SCALE AND CORROSION POTENTIAL

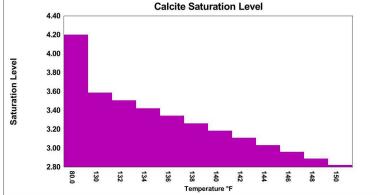
Temp.	Press.	Ca	lcite	Anh	nydrite	Gy	psum	В	arite	Cel	estite	Sic	lerite	Mack	awenite	CO2	CO ₂
(OF)	(psia)	Ca	CO ₃	Ca	SO ₄	CaSO	4*2H ₂ O	Ba	3SO ₄	Sr	SO ₄	Fe	CO_3	F	eS	(mpy)	mole %
80.00	14.70	4.20	1.98	0.112	-870.07	0.174	-672.19	728.42	8.42	2.12	19.70	851.49	3.01	57.68	0.546	0.0125	0.476
130.00	50.00	3.59	1.19	0.154	-644.18	0.194	-591.53	281.22	8.40	2.26	20.78	1017	1.92	20.64	0.516	0.0286	0.476
132.00	145.00	3.50	1.16	0.156	-638.51	0.194	-590.39	268.53	8.40	2.24	20.62	1014	1.89	19.75	0.513	0.0443	0.476
134.00	240.00	3.42	1.13	0.157	-632.54	0.194	-589.35	256.48	8.40	2.21	20.44	1011	1.85	18.88	0.509	0.0483	0.476
136.00	335.00	3.34	1.10	0.158	-626.31	0.194	-588.40	245.00	8.40	2.19	20.27	1009	1.82	18.07	0.506	0.0476	0.476
138.00	430.00	3.26	1.07	0.160	-619.81	0.193	-587.53	234.09	8.39	2.17	20.09	1005	1.79	17.28	0.503	0.0447	0.476
140.00	525.00	3.18	1.04	0.161	-613.07	0.193	-586.76	223.71	8.39	2.15	19.91	1001	1.76	16.54	0.500	0.0409	0.476
142.00	620.00	3.11	1.01	0.163	-606.09	0.193	-586.09	213.82	8.39	2.12	19.72	997.53	1.73	15.82	0.497	0.0386	0.476
144.00	715.00	3.03	0.980	0.165	-598.90	0.193	-585.51	204.42	8.39	2.10	19.53	993.47	1.70	15.14	0.493	0.0362	0.476
146.00	810.00	2.96	0.952	0.167	-591.50	0.193	-585.02	195.44	8.39	2.08	19.34	990.06	1.67	14.50	0.490	0.0338	0.476
148.00	905.00	2.89	0.924	0.169	-583.90	0.192	-584.64	186.90	8.39	2.06	19.15	986.30	1.64	13.88	0.486	0.0314	0.476
150.00	1000.00	2.82	0.896	0.171	-576.12	0.192	-584.35	178.76	8.38	2.04	18.95	982.20	1.61	13.29	0.483	0.0292	0.476
			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}{CO₃}/K_{sp}. CO₂ (mole %) refers to CO₂ in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









WARNER CALDWELL #003B

30-045-35506 San Juan Co., NM 384' FNL, 1960' FEL, Sec. 8, T23N, R08W 36.2479401°N, 107.7023926°W CONVERSION TO SALTWATER DISPOSAL



PROCEDURE:

- 1. Hold PJSM prior to beginning any operations. Ensure all onsite personnel abide by Enduring HSE protocol.
- 2. Comply with all NMOCD and BLM safety and environmental regulations.
- 3. Conduct safety meeting with all personnel and MIRU rig
- 4. Blow down well to flowback tank. Kill well as required.
- 5. Pressure test 2-7/8" tbg. Unseat pump, TOOH w/ rods and pump.
- 6. ND WH. NU BOPE and test.
- 7. TOOH w/ 2-7/8" tubing while scanning, standing back yellow band, LD blue/green/red band.
- 8. TIH with 2-7/8" tbg and 5-1/2" casing scraper to 5900'. POOH. LD scraper.
- 9. TIH with 5-1/2" CIBP on 2-7/8" tubing & set CIBP @ 5876' (50' above Greenhorn perfs).
- 10. MIRU cementers. Pump 12sx cement above CIBP f/ 5876' t/ 5776'. TOOH.
- 11. TIH with 5-1/2" CIBP on 2-7/8" tubing & set CIBP @ 5012' (50' above Gallup perfs).
- 12. Pump 12sx cement above CIBP f/ 5012' t/ 4912. TOOH.
- 13. TIH with 5-1/2" CIBP on 2-7/8" tubing & set CIBP @ 4434'.
- 14. Pump 12sx cement above CIBP f/ 4434' t/ 4334' (200' below planned injection perfs). TOOH.
- 15. Pressure test 5-1/2" casing to 1,000 psi
- 16. Rig up perforators. TIH and perforate the Point Lookout f/ 4134' t/ 3975'. TOOH.
- 17. PU AS1-X packer and RIH with 2-7/8" tubing with sub, packer, on/off tool and land packer 50' above top Point Lookout perforation @ 3925'.
- 18. Set packer and test tubing/casing annulus to 500 psi for 10 minutes. Bleed casing pressure.
- 19. Rig up acidizing crew. Pump 1,500 gal 15% HCl. Flush tubing and release acid crew.
- 20. Pull out of on/off tool, and POOH laying down tubing.
- 21. PU and TIH with 2-7/8" plastic lined tubing to packer @ 3925' and function test on/off tool.
- 22. Pull out of on/off tool and displace wellbore with packer fluid.
- 23. Latch onto on/off tool and chart official MIT with NMOCD witness on-site (provide inspector with 24 hour notification prior to chart recording).
- 24. NDBOP, NUWH and set tree for injection.
- 25. Establish initial injection rate to ensure well is taking fluid using no more than 50 bbl.
- 26. RDMO

Farmington Daily Times

Affidavit of Publication Ad # 0005305551 This is not an invoice

SUTHIWAN KHEM 6300 S SYRACUSE WAY SUITE 525 CENTENNIAL, CO 80111

I, being duly sworn say: Farmington Daily Times, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newsaper duly qualified for the purpose within the State of New Mexico for publication and appeared in the internet at The Daily Times web site on the following days(s):

06/20/2022

Legal Clerk

Subscribed and sworn before me this June 22, 2022:

State of WI, County of Brown NOTARY PUBLIC

My commission expires

SARAH BERTELSEN Notary Public State of Wisconsin

Ad # 0005305551 PO #: Legal Notice # of Affidavits: 1

This is not an invoice

Ms. Khem Suthiwan, Regulatory Manager at Enduring Resources, LLC. 200 Energy Court, Farmington, New Mexico 87401 (303-350-5721), wishes to provide notification for the submittal of an Application for Authorization to Inject to the New Mexico Oil Conservation Division (NMOCD). The application requests the use of existing well Warner Caldwell 003B, permitted with the New Mexico Oil Conservation Division, for the use as a Class II injection well. The well is located in San Juan County, New Mexico at latitude 36.2479401°N longitude -107.7023926°W. This well will be used to inject fluids produced from the enhanced recovery of oil and/or natural gas in the San Juan Basin. Fluids will be injected into the Point Lookout Formation at depths between 3,975 feet and 4,134 feet below ground surface. Maximum injection rates and pressures are anticipated to be 1130 barrels of water per day, respectively. Interested parties may contact the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within 15 days.

#5305551, Daily Times, June 20, 2022