Office Office	PM St	ate of New Mex	ico		Form C-103 ¹
<u>District I</u> – (575) 393-6161	Energy, Mi	nerals and Natura	l Resources	WELL ADIA	Revised July 18, 2013
1625 N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283				WELL API N 30-025-4534	
811 S. First St., Artesia, NM 88210		ISERVATION I		5. Indicate T	
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410		South St. Franc		STAT	E FEE X
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM	Sa	anta Fe, NM 875	05	6. State Oil &	& Gas Lease No.
87505					
SUNDRY NO (DO NOT USE THIS FORM FOR PROP	FICES AND REPORTED OF A STATE OF THE STATE O		BACK TO A	7. Lease Nar	me or Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPL				LIBBY BI	ERRY FEE SWD
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well O	ther SWD/INJECTI	ON	8. Well Num	iber 2
2. Name of Operator				9. OGRID N	
3BEAR FIEL 3. Address of Operator 415 W. W	D SERVICES, LLC			10. Pool nan	372603
	D, TX 79701				ONIAN-SILURIAN
4. Well Location				SWD, DEV	ONIAN-SILUKIAN
Unit LetterA	:540feet fro	om the <u>NORTH</u>	line and2	269fee	t from the <u>EAST</u> line
Section 22	Towns	ship 20S Rang	ge 34E	NMPM	County LEA
	11. Elevation (S	how whether DR, R	RKB, RT, GR, etc.)		
12 Chack	Appropriate Box	y to Indicate Nat	ure of Notice	Papart or Ot	har Data
12. CHECK	Appropriate Bo.	x to mulcate tvat	ure or Notice,	Report of Ot	ilei Data
	NTENTION TO	<u></u>		_	REPORT OF:
PERFORM REMEDIAL WORK			REMEDIAL WOR		ALTERING CASING
TEMPORARILY ABANDON PULL OR ALTER CASING] CHANGE PLAN] MULTIPLE CON		COMMENCE DRI CASING/CEMENT	_	☐ PANDA ☐
DOWNHOLE COMMINGLE	•		or converse		
CLOSED-LOOP SYSTEM]	_			_
OTHER:	unlated energtions		OTHER:	Laiva nartinant	dates, including estimated date
of starting any proposed v					
proposed completion or re			· · · · · · ·	1	
WENT TO PERFORM ANNU				ETERMINED T	HERE WAS PARTED
TUBING; NOTICE OF INTE	NT FOR REMEDIAL	WORK AND ACID	JOB		
-KILL WELL -RIH W/JET CUTTER AND (CUT INJECTION TU	BING @ 14398'MD			
-POH 5 1/2" INJECTION TUI	BING	<u> </u>			
-LOCATE RXN AND SET CI -TEST PKR TO 500 PSI	BP IN RXN			Conc	lition of Approval: notify
-RIH W/5 1/2" INJECTION T	UBING				D Hobbs office 24 hours
-CLEAN OUT					
-NOTIFY OCD OF MIT; CON -AFTER SUCESSFUL MIT; I		R WITH PROCEDUR	E ATTACHED	prior o	f running MIT Test & Chart
-741 TER SOCESSI OF WITT, I	Lid Oldw Melb 301	WIIIITROCLDON	L MI IMCILD.		
Spud Date: 02/28/2019		Rig Release Date	: 05/05/20	19	
I hereby certify that the information	n above is true and	complete to the best	of my knowledge	and helief	
Thereby certify that the information	1 above is true and v	complete to the best	or my knowledge	and bener.	
	en 1	mark was GD DI			02/01/2021
SIGNATURE Gennifer	frod	TITLESR. RI	EGULATORY TEC	CH .	_DATE03/01/2021
Type or print name <u>JENNIFER EI</u>	_ROD_	_ E-mail address:	jelrod@chisholmo	energy.com	PHONE: 817-953-3728
For State Use Only					
ADDROVED BY	1 4	TITLE Compli	ance Officer A		DATE 3/4/21
APPROVED BY:	Johner	TITE COMPI	GIIOGI A		DAIE OFFICE



LIBBY BERRY FEE SWD 002

Lea County, New Mexico

Stage 1

Prepared for: Jesse Fiedorowicz

Contact Number: 303-862-3963



Proposal ID: 3098 01/22/2021



Thank you for the opportunity to provide this proposal for your consideration. If you have any questions or require further information please feel free to contact us at any time. Cudd Energy Services appreciates the opportunity to provide this information and we look forward to being of service to you in the future.

Contact Information							
Type	Full Name	Phone	Cell	Email			
Sales	Robert Stephenson	+1 (432) 570- 5300	+1 (432) 425-8259	rstephenson@cudd.com			

The estimated cost is for the materials and/or services outlined within. The prices in this analysis are based on Cudd Energy Services current published prices and are effective for 30 days from the date of this analysis. Prices will be reviewed if the work is awarded after 30 days of this written analysis. The projected equipment, personnel, and material needs are estimates based on the information presently available to Cudd. At the time the work is actually performed, conditions may require an increase or decrease in the equipment, personnel, and/or material required. Charges will be based upon prices in effect at the time the work is performed and the amount of equipment, personnel, and/or material actually used. Taxes, if any, are not included but will be added to the actual invoice.



	Well Data - Stage 1							
Injection Down	Formation	Frac Gradient	BHFP	Reservoir Temperature	API Number	AFE Number		
Casing	Devonian	0.8	11740	170	3002545344			



	Treatment Schedule - Stage 1										
Step Num	Fluid	Stage Type	Cln. Vol. (bbls)	Cln. Vol. (gals)	Ttl. Rate (bpm)	Prop	Cum. Prop. (lbs)	Conc. (lb/gal)	Stg. Time (mins)	Cum. Time (mins)	Time Remaining (mins)
1	Fresh Water	Prepad - Establish Rate	23.8	1,000	15.0		0	0.00	1.6	1.6	71.1
2	20% 8515 ACIDTOL	Acid	285.7	12,000	25.0		0	0.00	11.4	13.0	69.5
3	10# Brine	2 PPG Salt	23.8	1,000	25.0		0	0.00	1.0	14.0	58.1
4	20% 8515 ACIDTOL	Acid	285.7	12,000	25.0		0	0.00	11.4	25.4	57.1
5	10# Brine	2 PPG Salt	23.8	1,000	25.0		0	0.00	1.0	26.3	45.7
6	20% 8515 ACIDTOL	Acid	285.7	12,000	25.0		0	0.00	11.4	37.8	44.8
7	10# Brine	2 PPG Salt	23.8	1,000	25.0		0	0.00	1.0	38.7	33.3
8	20% 8515 ACIDTOL	Acid	285.7	12,000	25.0		0	0.00	11.4	50.2	32.4
9	10# Brine	2 PPG Salt	23.8	1,000	25.0		0	0.00	1.0	51.1	21.0
10	20% 8515 ACIDTOL	Acid	285.7	12,000	25.0		0	0.00	11.4	62.5	20.0
11	Fresh Water	Flush	214.3	9,000	25.0		0	0.00	8.6	71.1	8.6

	Blender Schedule - Stage 1										
Step #	Clean Rate (bpm)	Stg. Clean (bbls)	Cum. Clean (bbls)	Blender Conc. (lb/gal)	Slurry Rate (bpm)	Stg. Slurry (bbls)	Cum. Slurry (bbls)	Prop Rate (lb/m)	Stg. Prop (lbs)	Cum. Prop (lbs)	Stg. Time (mins)
1	15.00	23.8	23.8	0.00	15.00	23.8	23.8	0	0	0	1.6
2	25.00	285.7	309.5	0.00	25.00	285.7	309.5	0	0	0	11.4
3	25.00	23.8	333.3	0.00	25.00	23.8	333.3	0	0	0	1.0
4	25.00	285.7	619.0	0.00	25.00	285.7	619.0	0	0	0	11.4
5	25.00	23.8	642.9	0.00	25.00	23.8	642.9	0	0	0	1.0
6	25.00	285.7	928.6	0.00	25.00	285.7	928.6	0	0	0	11.4
7	25.00	23.8	952.4	0.00	25.00	23.8	952.4	0	0	0	1.0
8	25.00	285.7	1,238.1	0.00	25.00	285.7	1,238.1	0	0	0	11.4
9	25.00	23.8	1,261.9	0.00	25.00	23.8	1,261.9	0	0	0	1.0
10	25.00	285.7	1,547.6	0.00	25.00	285.7	1,547.6	0	0	0	11.4
11	25.00	214.3	1,761.9	0.00	25.00	214.3	1,761.9	0	0	0	8.6



	Fluid System - Stage 1						
Parts Per Thousand	Parts Per Thousand UOM Description						
60,000 gals 20% 8515 ACIDTOL Additives per 1,000 gallons							
1000.00	GAL	ACIDTOL 20% HCL / 8515					
2.00	GAL	FE-400					
5.00	GAL	FE-6					
1.00	GAL	FR-620					
4.00	GAL	I-122					
1.00	GAL	NE-227					
4,000 gals 10# Brine Additives per 1,000 gallons							
10,000 gals Fresh Water Additives per 1,000 gallons							



	Price Estimate							
Category	Product ID	Description	Quantity	Units	Price	Gross	Discount	Net Price
Additive	7975	Coarse rock salt	10,000.00	LB	\$1.250	\$12,500.000	84%	\$2,000.00
Additive	3035	NE-227	60.00	GAL	\$67.600	\$4,056.000	84%	\$648.96
Additive	7455	I-122	240.00	GAL	\$131.250	\$31,500.000	84%	\$5,040.00
Additive	7644	FE-6	300.00	GAL	\$43.500	\$13,050.000	84%	\$2,088.00
Additive	9466	FR-620	60.00	GAL	\$118.000	\$7,080.000	84%	\$1,132.80
Additive	A7666	FE-400	120.00	GAL	\$68.800	\$8,256.000	84%	\$1,320.96
Additive	9412	ACIDTOL 20% HCL / 8515	60,000.00	GAL	\$9.250	\$555,000.000	84%	\$88,800.00
Equipment	7158	Acid transport delivery charge	1.00	DAY	\$1,425.000	\$1,425.000	84%	\$228.00
Mileage and Delivery	9180	Heavy Equipment Mileage	1,980.00	МІ	\$9.100	\$18,018.000	84%	\$2,882.88
Mileage and Delivery	9186	Light Equipment Mileage	220.00	МІ	\$8.840	\$1,944.800	84%	\$311.16
Services	5246	1300 Hp, 0- 5K, 1st 4hr	2.00	MIN	\$6,165.000	\$12,330.000	84%	\$1,972.80
Services	7155	Acid Monitoring Equipment	1.00	JOB	\$1,500.000	\$1,500.000	84%	\$240.00
Services	9129	Tank Blending prior to job	1.00	EA	\$750.000	\$750.000	84%	\$120.00
Services	5234	2200 Hp, 0- 10K, 1st 4hr	2.00	MIN	\$18,750.000	\$37,500.000	84%	\$6,000.00

Total \$704,909.80 **Discount** (\$592,124.24) **Net Price** \$112,785.56



Product Descriptions				
Product	Description			
FE-400	Neutral pH biodegradable product for dispersing iron sulfide.			
FE-6	Iron Chelating agent / Acetic Acid			
FR-620	Cationic friction reducer for oil field brines or fresh water.			
I-122	Acid corrosion Inhibitor for use at temperatures from 140° F to 225° F.			
NE-227	Non-emulsifyer			

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 19340

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
3BEAR FIELD SERVICES, LLC	1512 Larimer St, Suite 540	Denver, CO80202	372603	19340	C-103R

OCD Reviewer	Condition
kfortner	Run Post workover MIT test