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Office
District I
1625 N French Dr, Hobbs, NM 88240
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1301 W Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd, Aztec, NM 87410
District IV
1220 S. St Francis Dr, Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
June 19, 2008

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-09651 ✓
1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ Injector		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Resaca Operating Company		6. State Oil & Gas Lease No. 306443
3. Address of Operator 2509 Maurice Road, Odessa, TX 79763		7. Lease Name or Unit Agreement Name Cooper Jal Unit ✓
4. Well Location Unit Letter <u>A</u> : <u>330</u> feet from the <u>North</u> line and <u>330</u> feet from the <u>East</u> line Section <u>25</u> Township <u>24S</u> Range <u>36E</u> NMPM <u>Lea</u> County		8. Well Number <u>226</u> ✓
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3287' GL		9. OGRID Number <u>263848</u> ✓
		10. Pool name or Wildcat Jalmat; T-Y-7R/ Langlie Mattix; 7R-Q-G ✓

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: Clean Out & Acidize Injector ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

- 1.) MIRU Pulling Unit and Above Ground Steel Pit.
- 2.) POOH w/ 2 3/8" tubing and 5 1/2" x 2 3/8" Baker Model AD-1 Tension Packer.
- 3.) RIH w/ 4 3/4" Bit & 6- 3 1/2" Drill Collars on 2 7/8" work string. Clean out well to 3600'.
- 4.) Set Composite Plug & test plug; RIH w/ 4" Ultra FJ Liner to approximately 3600' (Proposed Top of Liner @ approx. 2800')
- 5.) Pump 50 sacks Class C + 0.3% C-16A + 0.6% C-35 + 0.25% R-38 (Density: 14.80 #/gal, Yield: 1.33 cubic ft/sack, Mixing Water: 6.30 gal/sack, Total Water to Mix: 7.50 bbls, Slurry Volume: 11.87 bbls.)
- 6.) RU Service Co. & perforate well in 7 Rivers between 3250'-3600' (Top Perf- approx. 3250'); Notify OCD of pending MIT.
- 7.) RIH w/ 5 1/2" x 2 3/8" Baker Model AD-1 Tension Packer; circulate annulus with inhibited packer fluid
- 8.) Set Packer within 100' of Top Perf; test annulus to 520 psig for 30 minutes; Pull chart for NMOCD.
- 9.) RDMO Pulling Unit, clean location, clean and dispose of pit fluids.
- 10.) Place well on Injection .

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Melanie Reyes TITLE Engineer Assistant DATE 6/20/12

Type or print name Melanie Reyes E-mail address: melanie.reyes@resacaexploitation.com PHONE: (432)580-8500

For State Use Only

APPROVED BY: [Signature] TITLE State Engineer DATE 6-28-2012

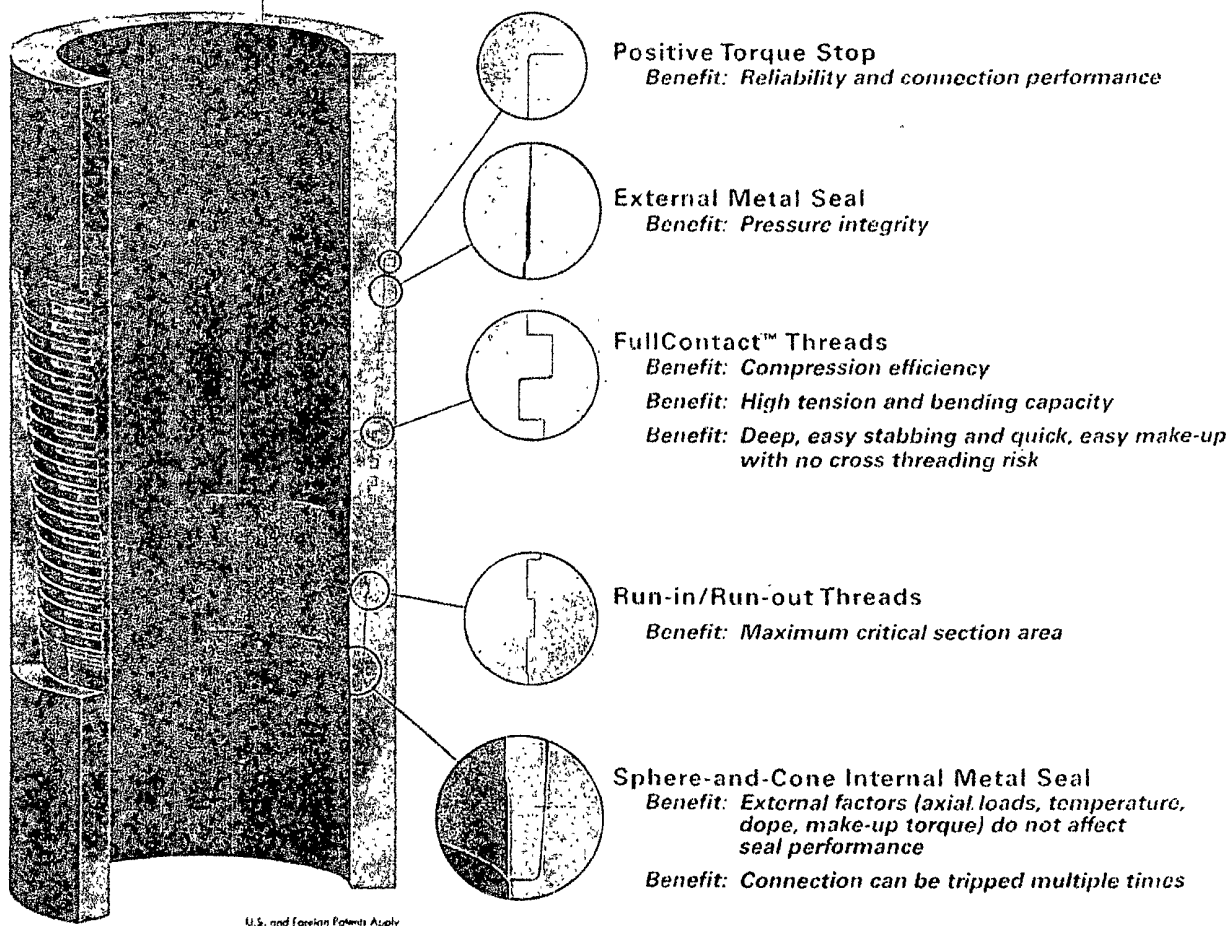
Conditions of Approval (if any):

WELLBORE SCHEMATIC AND HISTORY

CURRENT COMPLETION SCHEMATIC		LEASE NAME Cooper Jal Unit		WELL NO 226 WIW
		STATUS Active	Water Injector	API# 30-025-09651
Surface Csg Hole Size 11 in. Csg Size 8 5/8 in. Set @ 310 ft Sxs Cmt 100 Circ Yes TOC @ surf TOC by circ		LOCATION 330 FNL & 330 FEL, Sec 25, T - 24S, R - 36E, Lee County, New Mexico SPUD DATE TD KB 3,297' DF INT COMP DATE 05/16/50 PBTD 3600 GL 3,287'		
		ELECTRIC LOGS. GEOLOGICAL DATA Ejecto Log Tracer - MicroCaliper (11-9-76 Cardinal Surveys Co) CORES, DST'S or MUD LOGS.		
		HYDROCARBON BEARING ZONE DEPTH TOPS Yates @ 2985' 7-Rivers @ 3200' Queen @ 3560'		
Csg Swagged at 337' 481' 515' 1064' DV Tool @ 1137' 1287' TOC @ 1935' By Calc		CASING PROFILE SURF 8 5/8" - 28#, J-55 set@ 310' Cmt'd w/100 sxs - circ cmt to surf PROD 5 1/2" - 15#, J-55 set@ 2989' Cmt'd w/200 sxs - TOC @ 1935' f/ surf by calc. DV tool @1137' - pmp 200 sxs - LINER 5 1/2" - TOC@ 80' f/ surf by calc		
		CURRENT PERFORATION DATA CSG PERFS OPEN HOLE 2989'-3600'		
		TUBING DETAIL 4/14/2011 ROD DETAIL 2911' 92 2 3/8" IPC J-55, 4 7# 2' 1 5 1/2" x 2 3/8" Baker Model AD-1 pkr 2913'		
Production Csg. Hole Size 7 7/8 in Csg Size 5 1/2 in Set @ 2989 ft Sxs Cmt 250 Circ No TOC @ 80 f/ surf TOC by calc		WELL HISTORY SUMMARY 18-May-50 IC interval (Yates OH) 2989 - 3223': No stimulation IP = 88 bopd, 0 bwopd, & 125 Mcfgpd (flowing) 29-Dec-68 C/O fill from 3156 - 3214' (58') 8-Apr-69 C/O fill from 3140 - 3214' (74') 20-May-71 CONVERTED To WATER INJECTOR C/O from 3190 - 3223 (33') Swedged out 5 1/2" csg at 337', 481', 515', 1064' & 1287'. Ran pkr on 2 3/8" CL tbg Set pkr @ 2933' 9-Nov-76 Ran injection profile - had 220' of fill Identified 100% injection below 3003' 24-Nov-76 C/O fill from 3003 - 3223' (223'). Jet washed from 3223 - 2989' Encountered tight spot in 5 1/2" csg @ 1287' 12-Feb-90 C/O fill to 3,223' 01-Oct-93 Administrative Order No. WFX-648. Approved Division Order No. R-4019 & R-4020 for Waterflood Expansion. 15-Jun-95 Deepen to 3600'. Acdz'd OH (2989 - 600') w/ 5,000 gals 15% NEFE HCL. Returned well to injection (DHC - Jalmat & Langlie Mattix). Max surface injection pressure = 597 psi 17-Oct-00 Set CIBP @ @ 2960'. Tst CIBP & csg to 590 psi OK Displace well with pkr fluid Dmp 35' cmt on top of CIBP @ 2,960' PBTD at 2925' NMOCD representative on location RD & clean location Well TA'd 10-20-2000. 23-Aug-04 RIH w/ 4 3/4" bit and 6 - 3 1/8" drill collars on 2 7/8" work string Drilled out cement & CIBP at 2960' Cleaned open hole to 3240'. RIH w/ 5 1/2" x 2 3/8" IPC Baker Model AD-1 pkr Hydrotest tbg to 6,000#. Landed PKR at 2913', circ'd 80 bbls of fresh water plus 10 gallons of packer fluid Set PKR & test annulus to 520 psig for 30 minutes - head. Pulled chart for NMOCD NMOCD Rep witnessed the MIT Injection: 300 BWPD at 120 psig. Status change f/ Inactive to Active Injector. RIH with 1 1/4" x 5' sinker bar and tagged at 3,095'. 8-Nov-05 16-Jan-09 Test csg to 500 psig - okay POOH w/ IPC tbg & PKR RIH w/ 4 3/4" bit & drill collars, tagged @ 3,068' Drilled formation f/ 3241' to 3570' in 5 days Left 3 cones & 2 shanks of 4 3/4" button bit Could not recover w/ magnet RIH with 5 1/2" PKR on 2 3/8" IPC tubing (Hydrotest to 5,000#) MIT to 500 psig for 30 min Pulled chart for OCD Prior Rate/Press: 120 BWPD @ 380#. After Rate/Press: 350 BWPD @ 550#. 24-Sep-09 RU Gray WL RIH Logging Tool - tagged 3,560'. Ran injection profile RD WL. Rate/Press 563 BWPD @ 700 PSIG 11-Apr-11 POOH with injection string Cleaned out from 3,066' to 3,564' with 4 3/4" bit Acidized with 22,000 gals 15% 90/10 Acid/xylene AIR= 6 4 bpm Pavg= 1144 psig, Pmax= 1351 psig ISIP= 1274 psig Hydrotest injection string to 5,000 psig PKR @ 2913'		
		Proposed TOL @ 2800' Yates @ 2985' Jalmat OH Interval 2989'-3600' 7-R @ 3200' Shoe at approx 3,600' Langlie Mattix Queen @ 3560' TOF @ 3560' Bit Cones and shanks		
		PBTD 3600 ft TD 3600 ft OH ID 4 3/4 in		
PREPARED BY		Larry S Adams		Domingo Carrizales UPDATED 05-Aug-11

ULTRA-FJ the strongest flush-joint connection

- **ULTRA-FJ** has the highest tensile efficiency of any true flush-joint casing connection.
- **ULTRA-FJ** has compression efficiency equal to or greater than its tensile efficiency.
- **ULTRA-FJ** pressure ratings exceed API minimum internal yield and collapse pressure.



ultra premium oilfield services

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For the ULTRA-FJ Flush-Joint Connection: *compressive* mechanical efficiency $\geq$ *tensile* mechanical efficiency

L-80			I-95			P-110			G-125			Nom OD
Yield Load	Reference Depth	Parting Load	Yield Load	Reference Depth	Parting Load	Yield Load	Reference Depth	Parting Load	Yield Load	Reference Depth	Parting Load	
71,300	10,700	83,600	84,700	12,700	92,900	98,100	14,700	110,300	111,500	16,700	119,700	2 3/8
93,900	10,800	110,100	111,500	12,900	122,300	129,200	14,900	145,300	146,800	17,000	157,600	2 3/8
96,200	10,400	112,200	114,300	12,300	124,900	132,300	14,300	148,200	150,400	16,200	160,900	2 7/8
124,100	10,800	144,500	147,400	12,800	160,900	170,600	14,800	191,000	193,900	16,800	207,400	2 7/8
139,900	11,000	163,100	166,100	13,100	181,500	192,300	15,100	215,600	218,600	17,200	234,000	2 7/8
133,400	10,000	154,600	158,400	11,900	172,400	183,400	13,800	204,500	208,400	15,700	222,200	3 1/2
154,800	10,400	179,500	183,800	12,300	200,000	212,900	14,300	237,400	241,900	16,200	257,900	3 1/2
204,300	10,800	236,000	242,600	12,900	254,000	280,900	14,900	313,300	319,200	16,900	340,400	3 1/2
140,100	10,200	161,600	166,400	12,100	180,400	192,600	14,000	213,900	218,900	16,000	232,700	4
160,800	10,200	185,500	190,900	12,100	207,000	221,100	14,000	245,500	251,200	16,000	267,000	4
182,600	10,700	210,600	216,800	12,700	235,100	251,000	14,700	278,800	285,300	16,700	303,200	4
214,200	11,000	247,200	254,400	13,100	275,800	294,600	15,100	327,100	334,700	17,200	355,800	4
278,200	11,600	321,100	330,400	13,800	358,300	382,600	16,000	425,000	434,800	18,200	462,200	4
154,800	10,000	177,700	183,800	11,900	198,600	212,900	13,800	235,400	241,900	15,700	256,300	4 1/2
174,600	10,200	200,400	207,300	12,100	224,000	240,100	14,100	265,500	272,800	16,000	289,000	4 1/2
203,500	10,400	233,700	241,700	12,300	261,100	279,900	14,300	309,500	318,000	16,200	337,000	4 1/2
251,700	11,200	289,000	298,900	13,300	323,000	346,100	15,400	382,800	393,300	17,500	416,800	4 1/2
285,400	11,500	327,700	339,000	13,600	356,300	392,500	15,800	434,100	446,000	17,900	472,600	4 1/2
187,100	10,200	225,100	234,100	12,100	252,000	271,000	14,000	296,500	308,000	16,000	325,300	5
235,800	10,500	269,400	280,000	12,500	301,500	324,300	14,500	357,200	368,500	16,500	389,200	5
301,200	11,100	344,100	357,700	13,200	385,100	414,100	15,300	456,200	470,600	17,400	497,200	5
345,800	11,500	394,900	410,400	13,800	441,800	475,200	15,800	523,500	540,000	17,300	570,400	5
378,000	11,800	431,900	448,800	14,000	483,200	519,700	16,200	572,500	590,600	18,400	623,900	5
414,900	11,300	474,200	492,700	14,200	530,500	570,500	16,400	628,600	648,300	18,700	685,000	5
438,100	12,100	500,600	520,200	14,400	560,100	602,400	16,700	663,600	684,500	18,000	723,100	5
232,400	10,000	264,200	275,900	11,900	296,000	319,500	13,800	350,500	363,100	15,700	382,300	5 1/2
259,200	10,200	294,700	307,800	12,100	330,300	356,500	14,000	391,100	405,100	16,000	426,600	5 1/2
309,200	10,400	351,700	367,200	12,300	394,000	425,200	14,300	466,600	483,200	16,200	509,000	5 1/2
367,700	10,800	418,300	436,700	12,000	468,600	505,700	14,900	554,900	574,600	16,900	605,200	5 1/2
441,000	11,500	501,600	523,700	13,600	562,000	606,400	15,800	665,500	689,100	17,900	725,900	5 1/2
467,700	11,600	531,900	555,400	13,800	595,900	643,100	16,000	705,700	730,800	18,200	769,700	5 1/2
532,900	11,900	606,100	632,800	14,200	679,000	732,700	16,400	804,100	832,600	18,700	877,000	5 1/2
368,100	10,400	413,900	437,100	12,300	465,100	506,100	14,300	550,100	575,100	16,200	601,400	6 5/8
342,800	10,000	384,000	407,000	11,900	432,000	471,300	13,800	510,700	535,600	15,700	558,700	7
412,400	10,700	460,900	489,700	12,700	518,800	567,000	14,700	613,200	644,400	16,700	671,200	7
468,800	10,800	525,300	556,700	12,900	590,900	644,700	14,900	699,600	732,600	17,000	764,200	7
539,500	11,300	604,500	640,700	13,400	680,000	741,300	15,600	804,000	843,100	17,700	879,500	7
605,400	11,600	678,300	718,900	13,800	763,100	832,400	16,000	902,100	946,000	18,200	986,900	7
660,700	11,800	740,300	784,600	14,000	832,800	908,500	16,200	984,600	1,032,400	18,400	1,077,100	7
380,800	9,900	424,000	452,200	11,700	477,800	523,600	13,600	564,500	595,100	15,500	618,300	7 5/8
460,300	10,500	512,400	546,600	12,500	577,400	632,900	14,500	682,200	719,200	16,500	747,200	7 5/8
547,100	11,000	608,400	649,700	13,100	686,000	752,300	15,100	810,300	854,900	17,200	887,900	7 5/8
657,000	11,500	731,600	780,200	13,600	824,400	903,400	15,800	974,000	1,025,600	17,900	1,066,800	7 5/8
751,900	11,800	837,300	892,900	14,000	943,500	1,033,900	16,200	1,114,700	1,174,800	18,400	1,220,900	7 5/8
806,600	11,800	897,200	957,900	14,000	1,011,300	1,109,100	16,200	1,194,700	1,260,300	18,400	1,308,800	7 3/4
739,300	11,300	815,000	878,000	13,400	920,900	1,016,600	15,600	1,086,800	1,155,200	17,700	1,192,800	8 5/8
635,600	10,800	693,200	754,800	12,900	785,700	874,900	14,900	926,200	993,200	17,000	1,018,600	9 5/8
707,000	11,000	771,100	839,500	13,100	873,900	972,100	15,100	1,030,200	1,104,600	17,200	1,133,000	9 5/8
786,300	11,300	857,700	933,700	13,400	971,900	1,081,100	15,600	1,145,800	1,228,600	17,700	1,260,100	9 5/8
925,400	11,600	1,009,600	1,098,900	13,800	1,144,000	1,272,400	16,000	1,348,700	1,445,900	18,200	1,483,200	9 5/8
1,124,100	12,100	1,223,300	1,334,900	14,400	1,387,200	1,545,700	16,600	1,631,900	1,756,500	18,900	1,798,800	9 7/8
580,600	9,900	624,300	689,500	11,800	710,300	798,300	13,600	836,100	907,200	15,500	922,100	10 3/4
659,400	10,900	721,900	795,000	11,900	820,700	920,500	13,800	966,300	1,046,000	15,700	1,065,100	10 3/4
784,600	10,500	846,200	931,800	12,500	962,000	1,078,900	14,500	1,132,700	1,226,000	16,500	1,248,500	10 3/4
898,100	11,000	968,600	1,066,600	13,100	1,101,200	1,235,000	15,100	1,296,500	1,403,400	17,200	1,429,100	10 3/4
1,025,500	11,500	1,105,800	1,217,700	13,600	1,257,200	1,410,000	15,800	1,480,200	1,602,300	17,900	1,631,600	10 3/4
1,114,600	11,500	1,202,300	1,323,700	13,600	1,366,800	1,532,700	15,800	1,609,300	1,741,700	17,900	1,773,800	10 3/4
700,700	10,200	747,500	832,100	12,100	852,400	963,400	14,000	1,002,400	1,094,800	16,000	1,107,300	11 3/4
845,400	10,700	902,000	1,004,000	12,700	1,028,600	1,162,500	14,700	1,209,000	1,321,000	16,700	1,336,200	11 3/4
973,600	11,000	1,038,900	1,158,200	13,100	1,184,700	1,338,700	15,100	1,393,200	1,521,300	17,200	1,538,900	11 3/4
1,089,200	11,300	1,162,300	1,293,400	13,400	1,325,300	1,497,500	15,600	1,558,600	1,701,800	17,700	1,721,600	11 3/4
1,245,300	11,800	1,327,000	1,478,800	14,000	1,513,700	1,712,300	16,200	1,779,900	1,945,800	18,400	1,966,600	11 7/8
836,100	10,500	876,400	992,900	12,500	1,004,500	1,149,700	14,500	1,179,000	1,306,500	16,500	1,307,000	13 3/8
956,100	10,700	1,002,500	1,135,400	12,700	1,148,800	1,314,600	14,700	1,348,400	1,493,900	16,700	1,494,800	13 3/8
1,062,500	10,700	1,114,400	1,261,800	12,700	1,277,000	1,461,000	14,700	1,499,000	1,660,200	16,700	1,661,500	13 3/8
1,136,300	10,700	1,192,100	1,349,400	12,700	1,365,900	1,562,500	14,700	1,603,300	1,775,500	16,700	1,777,100	13 5/8
1,519,100	11,600	1,589,300	1,804,000	13,800	1,822,400	2,088,800	16,000	2,138,600	2,373,700	18,200	2,371,700	13 5/8

If you have a special application that requires a unique premium threaded connection, ULTRA can design a fit-for-purpose connection that meets your needs.

Contact ULTRA Premium Oilfield Services for specific details.

The ULTRA thread concept was originally invented by Erich F. Klementich PE, FASME, SPE with additional design improvements by Edward Banker PE.

Reference Depth = $\frac{\text{Connection Yield Load}}{(\text{PE WT/FU}) (1.5)}$

Reference depth includes a 1.5 Design Factor and does not consider bending, temperature, buoyancy or other load considerations.

ULTRA-F J Product Summary Pipe and Connection Data

PIPE BODY						CONNECTION				J-55		
Nominal OD	Nominal Weight	PE Weight	Wall Thickness	Drift Dia	Average PBA	Bored ID	% Tensile Efficiency	% Comprsn Efficiency	Make-Up Loss	Yield Load	Reference Depth	Parting Load
2 3/8	4.60	4.43	0.100	1.901	1.311	1.986	88.0%	70.1%	3.330	49,000	7,300	65,300
2 3/8	5.80	5.75	0.254	1.773	1.702	1.858	69.0%	71.1%	4.083	64,600	7,400	85,000
2 7/8	6.40	6.16	0.217	2.347	1.822	2.434	66.0%	68.0%	3.379	66,100	7,100	87,500
2 7/8	7.80	7.66	0.276	2.229	2.266	2.316	69.0%	71.1%	3.316	85,300	7,400	112,600
2 7/8	8.60	8.44	0.308	2.185	2.490	2.252	70.0%	72.1%	3.809	96,100	7,500	127,300
3 1/2	9.20	8.81	0.254	2.807	2.604	2.981	64.0%	66.0%	3.004	91,700	6,900	120,300
3 1/2	10.20	9.91	0.289	2.797	2.931	2.911	65.0%	68.0%	4.114	106,400	7,100	139,600
3 1/2	12.70	12.52	0.375	2.625	3.702	2.739	69.0%	71.1%	3.683	140,400	7,400	184,300
4	9.50	9.11	0.220	3.423	2.094	3.539	65.0%	67.0%	3.433	96,300	7,000	125,400
4	10.70	10.46	0.262	3.351	3.003	3.467	65.0%	68.9%	3.766	110,500	7,000	143,900
4	11.60	11.34	0.286	3.303	3.355	3.410	68.0%	70.1%	3.447	125,500	7,300	163,400
4	13.20	12.93	0.330	3.216	3.826	3.331	70.0%	72.1%	3.980	147,300	7,500	191,800
4	16.10	15.89	0.415	3.045	4.700	3.181	74.0%	76.2%	4.459	191,300	8,000	249,200
4 1/2	10.50	10.23	0.224	3.927	3.025	4.045	64.0%	65.9%	3.423	106,400	6,900	137,600
4 1/2	11.60	11.35	0.250	3.875	3.356	3.993	65.0%	67.0%	3.727	120,000	7,000	155,100
4 1/2	13.50	13.04	0.290	3.795	3.856	3.913	66.0%	68.0%	4.179	139,900	7,100	180,900
4 1/2	15.10	14.98	0.337	3.701	4.431	3.819	71.0%	73.1%	3.706	173,000	7,600	223,700
4 1/2	16.60	16.52	0.375	3.625	4.886	3.743	73.0%	73.8%	4.126	196,200	7,900	253,800
5	13.00	12.83	0.253	4.369	3.793	4.489	65.0%	66.9%	4.219	135,500	7,000	173,900
5	15.00	14.87	0.298	4.283	4.398	4.403	67.0%	69.1%	3.534	162,100	7,200	208,100
5	18.00	17.93	0.362	4.151	5.303	4.271	71.0%	73.1%	3.892	207,000	7,600	265,800
5	20.30	20.01	0.406	4.050	5.918	4.170	73.0%	75.2%	4.421	237,600	7,900	305,000
5	21.40	21.30	0.437	4.001	6.289	4.121	75.0%	77.3%	4.827	259,800	8,100	333,600
5	23.20	23.08	0.478	3.919	6.828	4.039	78.0%	78.2%	4.580	285,200	8,200	366,300
5	24.10	24.03	0.500	3.875	7.108	3.995	77.0%	79.4%	4.744	301,200	8,300	386,700
5 1/2	15.50	15.35	0.275	4.825	4.538	4.947	64.0%	65.9%	3.782	159,700	6,900	203,600
5 1/2	17.00	16.87	0.304	4.767	4.989	4.889	65.0%	66.9%	4.102	178,200	7,000	227,100
5 1/2	20.00	19.81	0.361	4.653	5.859	4.775	66.0%	68.0%	3.809	212,600	7,100	271,100
5 1/2	23.00	22.54	0.415	4.545	6.685	4.667	69.0%	71.0%	4.120	252,800	7,400	322,400
5 1/2	26.00	25.54	0.476	4.423	7.554	4.545	73.0%	75.2%	4.813	303,200	7,900	386,600
5 1/2	26.80	26.70	0.500	4.375	7.897	4.497	74.0%	76.3%	4.464	321,500	8,000	410,000
5 1/2	29.70	29.64	0.562	4.251	8.767	4.373	76.0%	78.3%	5.040	366,300	8,200	467,200
6 5/8	24.00	23.58	0.352	5.796	6.974	5.923	66.0%	68.0%	3.889	253,000	7,100	317,200
7	23.00	22.63	0.317	6.241	6.690	6.369	64.0%	65.9%	4.284	235,600	6,900	293,700
7	26.00	25.66	0.362	6.151	7.589	6.279	68.0%	70.0%	4.064	283,500	7,300	352,200
7	29.00	28.72	0.408	6.059	8.494	6.187	69.0%	71.1%	4.138	322,300	7,400	401,900
7	32.00	31.67	0.453	6.000	9.367	6.103	72.0%	74.2%	4.659	370,900	7,800	462,500
7	35.00	34.58	0.498	5.879	10.227	6.007	74.0%	76.2%	5.273	416,200	8,000	519,000
7	38.00	37.26	0.540	5.795	11.019	5.923	75.0%	77.2%	4.983	454,200	8,100	566,500
7 5/8	26.40	25.56	0.328	6.844	7.558	6.975	63.0%	64.9%	4.165	261,800	6,800	323,300
7 5/8	29.70	29.04	0.375	6.750	8.586	6.881	67.0%	69.0%	4.022	316,400	7,200	390,800
7 5/8	33.70	33.04	0.430	6.640	9.771	6.771	70.0%	72.1%	4.237	376,100	7,500	463,400
7 5/8	39.00	38.05	0.500	6.500	11.252	6.631	73.0%	75.2%	4.574	451,700	7,900	558,000
7 5/8	42.80	42.39	0.562	6.376	12.538	6.507	75.0%	77.2%	5.186	516,900	8,100	638,600
7 3/4	46.10	45.47	0.595	6.500	13.447	6.579	75.0%	77.2%	5.389	554,500	8,100	684,000
8 5/8	44.00	43.39	0.500	7.500	12.830	7.635	72.0%	74.2%	5.068	508,300	7,800	618,400
9 5/8	40.00	38.94	0.395	8.679	11.513	8.842	69.0%	71.1%	4.717	437,000	7,400	523,200
9 5/8	43.50	42.69	0.435	8.625	12.625	8.768	70.0%	72.1%	4.609	486,000	7,500	582,000
9 5/8	47.00	46.14	0.472	8.525	13.644	8.688	72.0%	74.2%	5.065	540,500	7,800	647,300
9 5/8	53.50	52.85	0.545	8.500	15.629	8.567	74.0%	76.2%	4.934	636,200	8,000	762,000
9 7/8	62.80	61.74	0.625	8.500	18.259	8.640	77.0%	79.3%	5.793	772,800	8,300	922,100
10 3/4	40.50	38.88	0.350	9.894	11.494	10.062	63.0%	64.5%	4.487	399,100	6,800	467,600
10 3/4	45.50	44.22	0.400	9.875	13.074	9.978	64.0%	65.9%	5.155	480,200	6,900	541,600
10 3/4	51.00	49.50	0.450	9.694	14.637	9.862	67.0%	69.0%	5.027	539,400	7,200	634,900
10 3/4	55.50	54.21	0.495	9.604	16.031	9.772	70.0%	72.1%	4.984	617,500	7,500	726,700
10 3/4	60.70	59.40	0.545	9.504	17.585	9.672	73.0%	75.2%	4.911	705,000	7,900	828,500
10 3/4	65.70	64.53	0.595	9.500	19.083	9.591	73.0%	75.2%	5.404	766,300	7,900	902,200
11 3/4	47.00	45.60	0.375	10.844	13.470	11.016	65.0%	67.0%	4.979	481,700	7,000	557,800
11 3/4	54.00	52.62	0.435	10.724	15.543	10.896	68.0%	70.0%	5.050	581,200	7,300	672,900
11 3/4	60.00	58.81	0.489	10.625	17.390	10.790	70.0%	72.1%	5.197	669,300	7,500	775,100
11 3/4	65.00	63.97	0.534	10.625	18.915	10.718	72.0%	74.1%	5.640	748,800	7,800	867,200
11 7/8	71.80	70.19	0.582	10.625	20.757	10.741	75.0%	77.2%	6.354	856,100	8,100	988,400
13 3/8	54.50	52.74	0.380	12.459	15.593	12.637	67.0%	69.0%	4.286	574,800	7,200	647,600
13 3/8	61.00	59.50	0.430	12.359	17.578	12.537	68.0%	70.0%	4.199	657,300	7,300	740,600
13 3/8	68.00	66.10	0.480	12.259	19.546	12.437	68.0%	70.0%	4.628	730,500	7,300	823,700
13 3/8	72.00	70.60	0.514	12.250	20.876	12.381	68.0%	70.1%	4.882	781,200	7,300	881,200
13 5/8	88.20	86.78	0.625	12.250	25.659	12.405	74.0%	76.2%	5.642	1,044,400	8,000	1,173,000

The performance properties given in these tables are calculated per API 5C3.

Yield Load is based upon minimum material values and average pipe body dimensions.

Parting Load is based upon minimum ultimate strength of the material and the API Buttress formula.

Neither Minimum Yield or Parting Load include any Design or Safety Factor.

The Strongest Flush-Joint Connection

**ULTRA
FJ**



ULTRA - FJ

Flush-Joint Connection

Size Range: 2 3/8" to 13 5/8"

- highest tensile efficiency
- compression efficiency equal to tensile
- exceeds API pressure ratings
- external metal seal
- fullcontact™ threads
- run-in / run-out threads
- positive torque stop
- sphere-and-cone internal metal seal

ultra

premium connections



ULtra-FJ (Flush-Joint) Torque Table
Odessa, Texas 24Hr # (432)580-6607 / (432) 362-4234

3 ½"	12.70#	L/N-80	2,700	3,000	3,300	7/08/04
3 ½"	12.70#	P-110	4,000	4,500	5,000	4/22/04
3 ½"	15.80#	P-110	4,300	4,800	5,300	4/22/04
4"	9.50#	J/K-55	1,850	2,050	2,300	4/22/04
4"	9.50#	L/N-80	2,400	2,700	3,000	4/22/04
4"	9.50#	P-110	3,600	4,100	4,600	4/22/04
4"	10.80#	J/K-55	1,900	2,150	2,400	4/22/04
4"	10.80#	L/N-80	2,500	2,850	3,200	4/22/04
4"	10.80#	P-110	3,800	4,300	4,850	4/22/04
4"	11.60#	J/K-55	2,050	2,300	2,550	4/30/05
4"	11.60#	L/N-80	2,750	3,100	3,400	12/29/05
4"	11.60#	P-110	4,150	4,650	5,100	4/30/05
4"	14.80#	J/K-55	2,190	2,440	2,680	5/24/06
4"	14.80#	L/N-80	2,900	3,250	3,580	5/24/06
4"	14.80#	T-95	3,470	3,860	4,250	5/24/06
4"	14.80#	P-110	4,390	4,880	5,370	5/24/06
4 ½"	9.50#	J/K-55	1,700	1,900	2,100	8/17/05
4 ½"	9.50#	L/N-80	2,200	2,500	2,750	8/17/05
4 ½"	10.50#	J/K-55	2,000	2,200	2,500	4/22/04
4 ½"	10.50#	L/N-80	2,600	2,900	3,200	4/23/04

Quote No eu1008



Cement Recommendation

4" Ultra FJ liner inside 4 3/4" OH @ 3600' TD

Prepared by:

Ethan Uranga

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Prepared for:

Domingo Carrizales

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432 580 8500

Resaca Operating Company CJU #226

Lea County, NM

6/12/2012

Sales Representative:

Jerry Walton

(432) 661-0313

District Manager:

Jaime Pacheco

(575) 391-0091

Service Point

Hobbs, NM

Office: (575) 391-0091

Fax: (575) 391-0094

Disclaimer Notice

This information is presented in good faith, but no warranty is given by and Rising Star Services assumes no liability for advice or recommendations made concerning results to be obtained from the use of any product or service. The results given are estimates based on calculations produced by a computer model including various assumptions on the well, reservoir and treatment. The results depend on input data provided by the Operator and estimates as to unknown data and can be no more accurate than the model, the assumptions and such input data. The information presented is RSS' best estimate of the actual results that may be achieved and should be used for comparison purposes rather than absolute values. The quality of input data, and hence results, may be improved through the use of certain tests and procedures which Rising Star Services can assist in selecting. The Operator has superior knowledge of the well, the reservoir, the field and conditions affecting them. If the Operator is aware of any conditions whereby a neighboring well or wells might be affected by the treatment proposed herein it is the Operator's responsibility to notify the owner or owners of the well or wells accordingly. Prices quoted are estimates only and are good for 30 days from the date of issue. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services.

Freedom from infringement of patents of Rising Star Services or others is not to be inferred.

RISEING STAR SERVICES	HOBBS, NM
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eu1008

June 12, 2012

Resaca Operating Company

CJU #226

Job Type: 4" Ultra FJ liner inside 4 3/4" OH @ 3600' TD

Office: (575) 391-0091

Fax: (575) 391-0094

Cell: 817 832 7206

<i>Sacks</i>	<i>Cement and Additives</i>
Single 50 sks	CLASS C + 0.3% C-16A + 0.6% C-35 + 0.25% R-38

50% Excess

	<i>Single</i>
Density:	14.80 #/gal
Yield:	1.33 cu.ft/sk
Mixing Water:	6.30 gal/sk
Total Water to Mix:	7.50 Bbls
Slurry Volume:	11.87 Bbls

TOP OF CEMENT @ 2850' TD

Total Sacks: 50 Total Ft* 66.67 Total H2O: 7.50

<i>Directions</i>							
Equipment Needed				Additional Materials and Notes			
4 1/2" Head and Manifold							
Well Information							
Hole Size		Total Depth		Hole @		DV Tool @	
Casing Size		Casing Depth		Perfs @		Type of Plug	
Liner Size		Tubing Depth		Packer @		Size of Plug	
Liner Top		Tubing Size		Retainer @		Pre-Flush	
Mud Weight:							
Special Job Instructions							
***** A CROSSOVER WILL NEED TO BE PROVIDED FROM A 4" FJ TO A 4 1/2" HEAD AND MANIFOLD *****							

RIISING STAR SERVICES

HOBBS, NM

eu1008

June 12, 2012

Resaca Operating Company

CJU #226

Job Type 4" Ultra FJ liner inside 4 3/4" OH @
3600' TD

Office: (575) 391-0091

Fax: (575) 391-0094

Mobile: 817 832 7206

	Quantity	Unit	Unit Price	Amount	After Discount
Depth Charge					
3501 - 4000', 4 hr minimum	1	Ea	\$2,775.00	\$2,775.00	\$2,358.75
Job Monitoring					
Data Acquisition	1	Job	\$1,050.00	\$1,050.00	\$892.50
Mileage Charge					
Equipment Mileage	70	Mile	\$7.10	\$497.00	\$422.45
Pick-up Mileage Charge	70	Mile	\$5.60	\$392.00	\$333.20
Cement Delivery Charge					
Cement Delivery, Minimum	1	Ea	\$1,680.00	\$1,680.00	\$1,428.00
Cement Blending					
Cement Blending	53	Cuft	\$3.00	\$157.53	\$133.90
Cementing Head					
Cementing Head with Manifold 4 1/2"	1	Job	\$525.00	\$525.00	\$446.25
Swedge Charge 4 1/2"	1	Job	\$475.00	\$475.00	\$403.75
Miscellaneous Services					
Enviormental Charge	1	Job	\$150.00	\$150.00	\$127.50
Top Plugs Rubber 4 1/2"	1	Ea	\$157.50	\$157.50	\$133.88
Cementing Materials					
Class "C"	50	Sks	\$26.00	\$1,300.00	\$1,105.00
C-16A	14	Lbs	\$15.75	\$222.08	\$188.76
Defoamer	1	Gal	\$47.25	\$47.25	\$40.16
R-38	12	Lbs	\$10.30	\$121.03	\$102.87
C-35	28	Lbs	\$15.75	\$444.15	\$377.53

	Price Book Total	\$9,993.53
15%	Discount	\$1,499.03
	After Disc	\$8,494.50

RISING STAR SERVICES

HOBBS, NM

eu1008

6/12/2012

Resaca Operating Company

CJU #226

Job Type 4" Ultra FJ liner inside 4 3/4" OH @ 3600'
TD

Office: (575) 391-0091

Fax: (575) 391-0094

Mobile: 817 832 7206

Product Description

Class C Is an API cement intended for surface to a depth of 6000 ft. Class C is sulfate resistant and yields early compressive strengths. Typically mixed from 14.8 ppg.

C-16A Is a non-retarding fluid loss additive with particular application in pozzolan slurries. It is highly effective at exceptionally low loadings (0.5% or below) in many slurry designs. It can also be used at 1% to 2.5% loadings in "latex cement" de

Defoamer A Clear liquid used to minimizes foaming tendencies and air entrapment in cement slurries during mixing process.

R38 Is a powdered defoamer for all types of oil well cement. Typical loadings are 0.25% to 0.5% BWOC.

C-35 Is a versatile dispersant/friction reducer for all oilwell cements. It is effective at salt concentrations from zero to saturation and at temperatures from 100 F to 400 F.

RIISING STAR SERVICES	HOBBS, NM
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eu1008

June 12, 2012
 Resaca Operating Company
 CJU #226
 Job Type 4" Ultra FJ liner inside 4 3/4" OH @ 3600'
 TD

Office: (575) 391-0091
 Fax: (575) 391-0094
 Mobile: 817 832 7206

	Quantity	Unit	Unit Price	Amount	After Discount
Mileage Charge					
Deliver Pick-Up Charge	1	Mile	\$200.00	\$210.00	\$136.50
Casing Equipment					
Guide Shoe	1	Ea	\$267.75	\$267.75	\$174.04
Float Collar	1	Ea	\$635.25	\$635.25	\$412.91

Price Book Total	\$1,113.00
35% Discount	\$389.55
After Disc	\$723.45