

MARKWEST RESOURCES, INC.
FULLERTON FEDERAL #6E DK
B Sec. 11 – T27N – R11W, San Juan County, N.M.
790' FNL & 1850 FEL

DK CLEANOUT
Pertinent Data Sheet

Field: Basin Dakota
Spud Date: 11/8/80
DK Completion Date: 12/9/80

Elevation: 6031' GL
KB=12'

TD: 6550'
PBTD: 6487'

CASING PROGRAM:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>TOC</u>
12-1/4"	8-5/8"	24# K-55	540'	375 sx	Circ. Cmt
7-7/8"	4-1/2"	10.5# K-55	6550'	575 sx	Circ. 50 sx Cmt
		DV Tool @	4691'	1050 sx	Circ. 50 sx Cmt

Tubing Record:
2-3/8" 4.7# J-55 6373' (SN & notched collar on bottom)
208 Jts.

Formation Tops:

Ojo Alamo	765'	Cliffhouse	3792'
Kirtland	860'	Point Lookout	4246'
Fruitland	1567'	Gallup	5403'
Pictured Cliffs	1852'	Dakota	6368'

Logging Record: Induction – 1980

Stimulation: Perf DK w/2 spf @ 6370'-94'. Total 48-.5" holes. Frac w/56,750# sand in X-linked gel. AIR=25 BPM. Max. Pressure = 1500#. ISICP=852 psi @ 6300'.

Workover History: 3/28/95: Tag fill @ 6468'. Isolate & sq csg leak @ 3855' w/50 sx cmt. Tight spot @ 4840'.

Production History: DK cum = 1189 MMCF & 6898 BO. Gas production suddenly dropped to 0 MCF/D from about 130 MCF/D. Csg will now produce about 50 MCF/D. Conclude that tbg is plugged.

FRTC RECOMPLETION & DUAL w/PC,MV,DK

GENERAL

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790' FNL & 1850 FEL

* Prior to rig-up and commencement of operations, review the attached general wellsite stipulations.

* All information concerning the workover operations of this well shall remain **confidential** and shall not be released without the written consent of MarkWest Resources.

1. MOL & RU, test anchors, set pump, 1 frac tank & air equipment. **All water to be 2% KCL or filtered produced PC or FRTC water.**
2. Kill well w/ water or set blanking plug in 2-3/8" SN @ 6373'
3. ND WH, NU BOP. TIH to tag bottom & strap OH w/2-3/8" tbg.
4. If necessary, TIH w/3-7/8" bit on 2-3/8" tbg & CO to PBTD 6487' w/air/mist. TOH. **NOTE: Tight spot @ 4840'.**
5. Rabbit in hole w/2-3/8" tbg & land @ 6400' w/SN one jt above open ended bottom. Replace all bad tbg jts.
6. ND BOP, NU WH. Unload & blow well as needed & place on line.

EQUIPMENT & VENDORS LIST

ITEM:	VENDOR	PHONE #
RIG:	KEY ENERGY SERVICES	970-563-9053 505-327-0416
RIG SUPERVISOR:	MIKE CONFER	505-599-7461 505-330-2022
ENGR. CONSULTANT 4573	MIKE PIPPIN	505-327- 505-330-0495
DOWNHOLE TOOLS:	BAKER	505-325-0216
TRUCKING:	SUNCO	505-327-0416
WELLHEAD	CAMERON	505-327-3402

WELLBORE DIAGRAM

DK CLEANOUT

FULLERTON FEDERAL #6E DK

790' FNL & 1850' FEL (B) Sec. 11 T-27N, R11W

Basin Dakota

San Juan County, New Mexico

PMP 5/15/01

Hole Size: 12-1/4"

Casing: 8-5/8", 24# K-55 @ 540'

w/375 sx cmt.

Circ cmt

2-3/8" 4.7# J-55 tbg
@ 6373' w/SN & notched
collar on bottom.

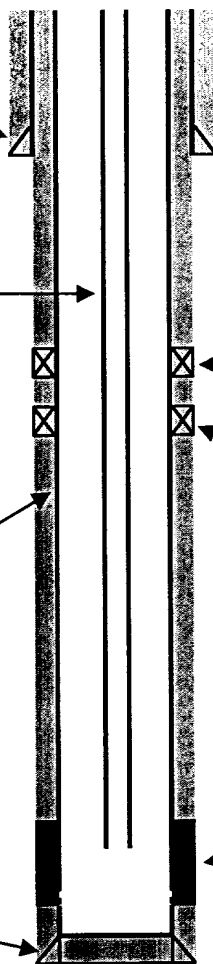
Tight spot in 4-1/2" csg @ 4840'

Hole Size: 7-7/8"
4-1/2", 10.5# K-55 @ 6550'
w/575 sx cmt. Circ. 50 sx
Cmt.

SQ csg leak @ 3855' w/50 sx cmt

DV Tool @ 4691'. Cmt'ed
w/1050 sx Cmt. Circ. 50
sx Cmt to surface.

Perf DK @ 6370'-94' & frac w/56,750#
sand in X-linked gel.



6487' PBTD

6550' TD

MARKWEST RESOURCES, INC.
155 INVERNESS DRIVE WEST, SUITE 200
ENGLEWOOD, COLORADO 80112

PROSPECT: ANGEL PEAK
WELL NAME : FULLERTON FEDERAL #6E DK
COUNTY :San Juan
STATE : New Mexico
LOCATION : B Sec.11 T27N R11W
OPERATOR : MarkWest

AFE #
WELL #: 6E
PROPOSED DEPTH: 6550' FT
OBJECTIVE : DAKOTA
DATE : 5/15/01
COMMENCEMENT DATE : 6/16/01

OVERALL PLAN: CLEAN OUT DAKOTA & REPAIR PLUGGED TBG

STEPS

- 1 CHECK FOR FILL & PULL TBG
- 2 CLEAN OUT DK TO PBTD 6487'
- 3 RABBIT TBG IN HOLE & REPLACE ALL BAD JTS
- 4 RETURN WELL TO PRODUCTION

CURRENT DK PRODUCTION (FROM CSG)
ESTIMATED DK UPLIFT:

50 MCF/D
130 MCF/D

INCREMENTAL ECONOMICS
RATE OF RETURN
PAYOUT
P/I (\$/\$N @10%)

SUMMARY OF ESTIMATED COSTS

1980	INTANGIBLE WORKOVER COSTS		DAKOTA
101	LOCATION		\$1,000
103	LABOR (WELDING, ETC.)		
104	ACIDIZING		
106	CASING CREW		
108	CEMENT		
109	PIPE INSPECTION		
201	WATER DISPOSAL		\$500
202	WORKOVER RIG (5 Days \$3,000/day)		\$15,000
203	PERFORATIONS		
203	CASED HOLE LOGS		
204	FUEL & WATER		\$500
205	FRAC WATER		
206	FRAC		
207	EQUIPMENT & TOOL RENTAL		\$500
209	FLOW TESTING		
210	TRANSPORTATION		\$500
212	COMPANY SUPERVISION		\$2,500
	COMPRESSION		\$5,000
217	ROUSTABOUT LABOR		\$500
218	MISC. (bits, float, strippers)		\$500
220	BATTERY CONSTRUCTION		
328	CONTINGENCIES (20%)		\$5,300
	SUBTOTAL INTANGIBLE WORKOVER		\$31,800
1910	TANGIBLE WORKOVER COSTS		
102	TUBING 200' OF 2-3/8" 4.7# J-55 EU @\$2.10/~T		\$420
102	TUBING 200' FO 3-1/2" 9.2# J-55 NUE @ \$3.85/FT		
152	WELLHEAD & VALVES		
208	DOWNHOLE VALVES & NIPPLES		
210	TREATER/SEPARATOR		
211	TANK BATTERY		
212	METERS		
213	SURFACE FITTINGS & FLOW LINE		
214	BUILDINGS		
215	FENCES-CATTLE GUARD		
216	OTHER (80 HP Wellhead Compressor)		
217	ANCHORS		
	CONTINGENCIES (15%)		\$63
	SUBTOTAL TANGIBLE WORKOVER		\$483
	TOTAL WORKOVER COSTS		\$32,283
	TOTAL AFE		\$32,283

PMP

APPROVALS:

MARKWEST RESOURCES, INC.

TITLE

MARKWEST RESOURCES, INC.

TITLE

MARKWEST HYDROCARBON, INC.

TITLE