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# D.J. SIMMONS, INC.

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June 7<sup>th</sup>, 2001

CERTIFIED MAIL-RETURN RECEIPT

Forcenergy Onshore, Inc.  
C/O Forest Oil Corporation  
1600 Broadway, Suite 2200  
Denver, Colorado 80202

COPY

T. H. McElvain Oil & Gas Limited Partnership  
1050 17<sup>th</sup> Street, Suite 1800  
Denver, Colorado 80265

Dugan Production Corporation  
709 East Murray Drive  
Farmington, New Mexico 87499

RE: Two Well Proposal  
Bishop Federal #25-1 Well  
Bishop Federal #25-2 Well  
Township 25 North – Range 3 West, NMPM  
Section 25: NE/4  
Rio Arriba County, New Mexico

Gentlemen:

D. J. Simmons, Inc. ("Simmons") is proposing the drilling of two (2) test wells. One in the NE/4 of Section 25, the other in the SE/4 of Section 25, Township 25 North – Range 3 West, NMPM, Rio Arriba County, New Mexico to test all productive formations between the surface of the earth and one hundred feet below the top of the Burro Canyon formation. Well spacing for all formations except the Fruitland Coal and Mesaverde is 160 acres. The Fruitland Coal and Mesaverde spacing is 320 acres. Simmons' main objective is the Dakota formation, however, Simmons is proposing an E/2 unit in the event the Mesaverde is commercially productive.

The Unit percentages in and to the E/2 of Section 25, Township 25 North – Range 3 West, NMPM, Rio Arriba County, New Mexico are as follows:

D. J. Simmons, Inc.	75.000%
Forcenergy Onshore, Inc.	12.500%
T. H. McElvain Oil & Gas Limited Partnership	9.375%
Dugan Production Corporation	<u>3.125%</u>
	100.000%

Lease ownership as follows:

**Section 25: NE/4 and the N/2SE/4**

D. J. Simmons, Inc.	100.000%
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**Section 25: S/2SE/4**

Forcenergy Onshore, Inc.	50.000%
T. H. McElvain Oil & Gas Limited Partnership	37.500%
Dugan Production Corporation	<u>12.500%</u>
	100.000%

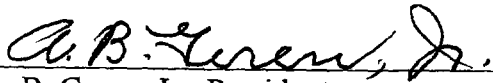
The location for the proposed Bishop Federal #25-1 is in the NE/4 and the location for the Bishop Federal #25-2 is the NW/4SE/4, both in Section 25, Township 25 North – Range 3 West, NMPM, Rio Arriba County, New Mexico. These wells will be permitted as Dakota tests. The locations have been staked, and the permitting process with the BLM and the New Mexico OCD has begun.

Simmons offers you the options to either participate or farmout your interest in the Mesaverde formation only, and only at such time as Simmons completes that zone for the First Test Well (Bishop Federal #25-1). The Bishop Federal #25-2 would be drilled as a Gallup/Dakota test with partners participating as to their interests. Enclosed herewith for your perusal is Simmons well procedures and AFEs for the subject wells. Should the wells be productive in the Mesaverde formation, and you chose to participate or farmout, Simmons will provide you with a Joint Operating Agreement 610-1982 with a 100/300/300 percent non-consent and a COPAS 1984 Accounting Procedure with a Overhead-Fixed Rate of \$350/\$3,500 per well. In addition, you will be provided with information concerning the drilling and completion of the Bishop Federal #25-1 and #25-2 wells. Simmons would also entertain the purchase of your rights as to the Mesaverde formation only, at a fair market value.

As you are obviously aware, McElvain Oil & Gas Properties, Inc. is proposing the formation of a S/2 Section 25 spacing unit and is in conflict with this proposal. The matter is currently before the New Mexico OCD for a decisions. In the event the OCD should rule in favor of the McElvain proposal, Simmons would propose the formation of a N/2 Section 25 spacing unit for the Mesavarede in the Bishop Federal #25-1. Obviously, the ability to commingle or re-complete the Mesaverede as to the Bishop Federal #25-2 would be lost.

In that time is of the essence, your early reply would be most appreciated.

D. J. Simmons, Inc.

  
A. B. Geren, Jr., President

enclosures

# D.J. SIMMONS, INC.

## Drilling Plan

**Well Name:** Bishop Federal 25-1

**Surface Location:** 1303 FNL x 710 FEL, Section 25, T29N, R9W  
Rio Arriba County, NM

**Bottom Hole Location:** 1303' FNL x 1912' FEL, Section 25

**Formation:** Gallup/Dakota

**Elevation:** 7235' GL

### Geology:

Formation	Top True Vertical Depth	Top Measured Depth	Probable Content
San Jose	Surface	Surface	
Ojo Alamo	3321	3321	salt water
Fruitland	3421	3421	gas/water
Pictured Cliffs	3607	3607	gas
Chacra	4022	4022	gas
Mesa Verde	5207	5207	gas
Menefee	5305	5305	gas
Point Lookout	5720	5720	gas
Mancos	5960	5960	gas/oil
Gallup	6758	6760	gas/oil
Graneros	7872	8215	gas/oil
Dakota	7979	8366	gas/oil
Burro Canyon	8147	8147	gas/water

**Logging Program:** Spectral Density, Epithermal Neutron, Induction Log from TD to surface casing shoe.

### Drilling Fluid Program:

\* Note: all depths are Measured Depths

Interval	Fluid Type	Weight	Viscosity	Fluid Loss
0' - 600'	fresh water spud mud	8.4 - 9.0 ppg	30 - 50 sec	no control
600' - 5207'	2% KCL / PHPA polymer	8.4 - 9.0 ppg	30 - 50 sec	no control
5207' - TD	2% KCL / PHPA polymer	8.4 - 9.0 ppg	30 - 50 sec	10

**Casing Program:**

\* Note: all depths are Measured Depths

Interval	Hole Diameter	Csg Size	Wt.	Grade	Thread
0' – 600'	12 1/4"	9 5/8"	32 ppf	J-55	LTC
0' – 6200'	7 7/8"	5 1/2"	15.50 ppf	J-55	LTC
6200' – 7700'	7 7/8"	5 1/2"	17 ppf	J-55	LTC
7700' – 8715'	7 7/8"	5 1/2"	17 ppf	N-80	LTC

**Tubing Program:** 0 – 8600', 2 3/8", 4.7 ppf, J55, EUE

**BOPE and Wellhead Specifications and Testing:**

From surface casing shoe to TD: 9 5/8" 3000 psi threaded casing head with two 2" outlets. 11", 3000 psi double gate BOP and 3000 psi choke manifold (see figures 1 and 2). Pressure test BOPE to 3000 psi and 9 5/8" surface casing to 600 psi prior to drilling surface casing shoe.

For completion operations: 7" x 2 3/8", 3000 psi tree assembly. 7 1/16", 3000 psi double gate BOP system (see figure 3).

**General Operation:**

- Actuate pipe rams once each day during drilling operations. Actuate blind rams once each trip.
- An upper Kelly cock valve, with handle, will be available on the rig floor to fit each drilling string.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in the daily drilling report.
- Blind and pipe rams will be equipped with extension hand wheels.

**Cementing Program:**

**9 5/8" Surface Casing String:** Run casing with saw tooth guide shoe on bottom, insert float valve one joint from bottom, and install bowspring centralizers as per Onshore Order #2. Cement with 350 sks class 'G' with 1/4 #/sk flocele and 3% CaCl<sub>2</sub> (413 cf slurry, 100% excess to circulate to surface).

**5 1/2" Production Casing String:** Run casing with float shoe on bottom, float collar one joint from bottom and centralizers every other joint from TD to 3700'. Install stage collars at 5960' and 3700'. Cement in three stages. Stage 1 (8715' – 5960'); 450 sks class 'G' 50/50 poz with, 2% gel, 1/4 #/sk flocele, 5 #/sk gilsonite. Stage 2 (5960' – 3700'); 370 sks class 'G' 50/50 poz with 2% gel, 1/4 #/sk flocele, 5 #/sk gilsonite. Stage 3 (3700' – 0'); 610 sks class 'G' 50/50 poz with 2% CaCl<sub>2</sub>, 6% gel, 1/4 #/sk flocele, 5 #/sk gilsonite. Precise slurry volumes to be calculated from open hole log caliper plug 25% excess. Top of cement to be at surface.

## **Special Drilling Operations:**

### **Directional Drilling**

This well will be directionally drilled to the bottom hole location specified above. A detailed directional plan is supplied as Attachment #1. Directional surveying will be primarily performed with MWD (measurement while drilling) tools.

### **Additional Information:**

- This well is to be completed in the Gallup and Dakota formations.
- No abnormal temperature or pressure, or other hazards are anticipated.
- LCM will be added to the mud system as required to maintain circulation.
- Estimated formation pressures:
  - Fruitland Coal 300 psi
  - Pictured Cliffs 300 psi
  - Mesa Verde 600 psi
  - Gallup 650 psi
  - Dakota 800 psi

### **Completion Information:**

The completion procedure will be prepared after open hole logs are analyzed. The well will probably be completed by hydraulic frac in two to three stages.

Prepared by: Robert R. Griffie  
Operations Engineer  
Date: 06/07/01

Bishop Federal 25-1 Drilling and Completion AFE		page 1		
Description: 8768' md (8263' tvd) directionally drilled Gallup/Dakota test. Assumes standard drilling rig is utilized.				
AFE assumes completion in both the Gallup and Dakota formations with a two stage frac.				
Prepared by: R. Griffie				
Dry Hole Cost				
Cost Item Code	Description	Intangible	Tangible	Total
Preparation				
101 Permitting	permitting, survey, and archaeology	\$10,000.00		\$10,000.00
102 Dirtwork	blading, location preparation, anchors	\$5,500.00		\$5,500.00
103 Reclamation	dirtwork, water disposal	\$1,500.00		\$1,500.00
Drilling Rig Costs				
110 Rig Mobilization		\$25,000.00		\$25,000.00
111 Daywork Drilling Cost	14 days @ \$7500 per day	\$105,000.00		\$105,000.00
112 Footage Drilling Cost				
113 Turnkey Drilling Cost				
Drilling Equipment				
120 Drilling Bits		\$25,000.00		\$25,000.00
121 Drilling Tools	reamers, stabilizers, rental drill pipe, etc.			
122 Rental Equipment		\$2,240.00		\$2,240.00
Services				
133 Trucking	hauling pipe & materials, hot shot services	\$10,000.00		\$10,000.00
134 Water	water cost and hauling charges	\$25,000.00		\$25,000.00
135 Fuel	drilling contractor to provide			
136 Mud	mud, chemicals, soap, etc.	\$6,500.00		\$6,500.00
137 Air Drilling Services				
138 Directional Services		\$80,000.00		\$80,000.00
139 Fishing Services				
140 Safety Services	H2S monitoring, etc.			
141 Wireline Services				
142 Contract Labor	roustabout services, casing crews, welders, etc.	\$10,000.00		\$10,000.00
143 Inspection Services				
144 Down-hole Tools				
148 Other Services				
Cementing				
150 Primary Cementing	surface casing	\$3,500.00		\$3,500.00
151 P&A Cementing		\$5,100.00		\$5,100.00
152 Remedial Cementing				
Design and Supervision				
160 Engineering/Geology Design				
161 Field Supervision		\$9,600.00		\$9,600.00
162 Operator Overhead				
163 Outside Operator Overhead				
Formation Evaluation				
170 Open Hole Logging		\$30,000.00		\$30,000.00
171 Drill Stem Testing				
172 Coring	coring, and core analysis			
173 Mud Logging				
174 Field Geologist				
175 Flow Testing				
176 Laboratory Services				
Tangible Items				
180 Conductor Casing				
181 Surface Casing	600', 9 5/8", 32 ppf, J55 @ \$8.71/ft		\$7,680.00	\$7,680.00
182 Intermediate Casing				
183 Intermediate Casing				
184 Float Equipment	shoe, DV collar, centralizers, etc.		\$1,150.00	\$1,150.00
185 Casing Tools	liner hanger, etc.			
186 Pipe Inspection	casing and tubing strings			
187 Well Head Equipment			\$1,500.00	\$1,500.00
Miscellaneous				
190				
Total Dry Hole Cost		\$353,940.00	\$10,330.00	\$364,270.00

Completion Costs		page 2		
Cost to run Production Casing and complete with two stage frac in both the Gallup and Dakota		prepared by: R. Griffie		
Cost Item Code	Description	Intangible	Tangible	Total
<b>Preparation</b>				
201 Permitting				
202 Dirtwork	blading, location preparation, anchors	\$1,500.00		\$1,500.00
203 Reclamation	dirtwork, water disposal			
<b>Completion Rig Costs</b>				
210 Rig Mobilization		\$2,800.00		\$2,800.00
211 Hourly or Daily Cost		\$25,680.00		\$25,680.00
212 Expendables	swab cups, line, etc.	\$1,800.00		\$1,800.00
213				
<b>Workover Equipment</b>				
220 Bits and Mills		\$650.00		\$650.00
221 Workover tools				
222 Rental Equipment		\$2,000.00		\$2,000.00
<b>Services</b>				
233 Trucking	hauling pipe & materials, hot shot services	\$14,500.00		\$14,500.00
234 Water	water cost and hauling charges	\$20,000.00		\$20,000.00
234 Fuel	for air drilling equipment			
236 Mud	mud, chemicals, soap, etc.			
237 Air Drilling Services				
238 Directional Services				
239 Fishing Services	fishing tools, etc. Mills			
240 Safety Services	H2S monitoring, etc.			\$0.00
241 Wireline Services	CBL, correlation, squeeze perforating, etc.	\$6,500.00		\$6,500.00
242 Contract Labor	roustabout services, casing crews, welders, etc.	\$2,500.00		\$2,500.00
243 Inspection Services				
244 Down-hole Tools	test packers, bridgeplugs, cement retainers	\$15,000.00		\$15,000.00
245 Stimulation Services	acidizing, frac, etc.	\$100,000.00		\$100,000.00
246 Misc Pumping Services	CO2, Nitrogen, etc.			
247 Hydrotesting Services				
248 Other Services				
<b>Cementing</b>				
250 Primary Cementing	cementing of new production string	\$45,000.00		\$45,000.00
251 P&A Cementing				
252 Remedial Cementing				
<b>Design and Supervision</b>				
260 Engineering/Geology Design				
261 Field Supervision		\$6,400.00		\$6,400.00
262 Operator Overhead				
263 Outside Operated Overhead				
<b>Formation Evaluation</b>				
270 Cased Hole Logging	for formation evaluation			
271 Drill Stem Testing				
272 Coring	coring, and core analysis			
273 Mud Logging				
274 Field Geologist				
275 Flow Testing	flow test, pressure built up, etc.			
276 Laboratory Services	gas, oil, & water analysis			
<b>Tangible Items</b>				
280 Production Casing	8715' of 5 1/2" 15.50 and 17 ppf casing		\$58,782.45	\$58,782.45
281 Tubing	8600' of 2 3/8" EUE		\$18,060.00	\$18,060.00
282 Tubing				
283 Tubing String equipment			\$1,100.00	\$1,100.00
284 Float Equipment	shoe, DV collar, centralizers, etc.		\$15,000.00	\$15,000.00
285 Casing Tools	liner hanger, etc.			
286 Pipe Inspection	casing and tubing strings			
287 Well Head Equipment			\$5,400.00	\$5,400.00
288 Permanent Packers	permanent production packers, bridgeplugs, etc.			
289 Miscellaneous Pipe and Fittings			\$1,500.00	\$1,500.00
<b>Miscellaneous</b>				
290				
Completion Cost Total		\$244,330.00	\$99,842.45	\$344,172.45



Production Equipment			page 3		
Costs to set Production Tanks, Separator, and prep location. Does not include pipeline or pumping unit costs			prepared by: R. Griffie		
Cost Code	Item Description	Intangible	Tangible	Total	
Tangible Items					
501	Production Tanks		\$ 17,500.00	\$17,500.00	
502	Flow Lines, Valves, and Fittings		\$ 5,000.00	\$5,000.00	
503	Pumping Equipment - Surface pumping unit				
504	Pumping Equipment - Downhole rods, pump, etc				
505	Production Units heater treater / separator		\$ 35,000.00	\$35,000.00	
506	Metering Equipment				
507	Wellsite Compression				
508	Buildings				
509	Miscellaneous		\$ 5,000.00	\$5,000.00	
Installation and Construction					
520	Contract Labor	\$ 20,000.00		\$20,000.00	
Production Equipment Total		\$ 20,000.00	\$ 62,500.00	\$ 82,500.00	

AFE Summary					
Cost Code	Item Description	Intangible	Tangible	Total	
	Dry Hole Cost	\$353,940.00	\$10,330.00	\$364,270.00	
	less P&A Cementing Cost	-\$5,100.00	\$0.00	-\$5,100.00	
	Completion Cost	\$244,330.00	\$99,842.45	\$344,172.45	
	Production Equipment Cost	\$ 20,000.00	\$ 62,500.00	\$ 82,500.00	
	<b>Total Estimated Well Cost</b>	<b>\$613,170.00</b>	<b>\$172,672.45</b>	<b>\$785,842.45</b>	
	excluding pipeline and pumping unit				

# **D.J. SIMMONS, INC.**

## **Drilling Plan**

**Well Name:** Bishop Federal 25-2

**Surface Location:** 2175 FSL x 1813 FEL, Section 12, T29N, R9W  
Rio Arriba County, NM

**Bottom Hole Location:** Same

**Formation:** Gallup/Dakota

**Elevation:** 7187' GL

### **Geology:**

Formation	Top Measured Depth	Probable Content
San Jose	Surface	
Ojo Alamo	3235	salt water
Fruitland	3335	gas/water
Pictured Cliffs	3510	gas
Chacra	3945	gas
Mesa Verde	5197	gas
Menefee	5294	gas
Point Lookout	5710	gas
Mancos	5948	gas/oil
Gallup	6677	gas/oil
Graneros	7802	gas/oil
Dakota	7909	gas/oil
Burro Canyon	8079	gas/water

**Logging Program:** Spectral Density, Epithermal Neutron, Induction Log from TD to surface casing shoe.

### **Drilling Fluid Program:**

Interval	Fluid Type	Weight	Viscosity	Fluid Loss
0' - 600'	fresh water spud mud	8.4 - 9.0 ppg	30 - 50 sec	no control
600' - 5197'	2% KCL / PHPA polymer	8.4 - 9.0 ppg	30 - 50 sec	no control
5197' - TD	2% KCL / PHPA polymer	8.4 - 9.0 ppg	30 - 50 sec	10

**Casing Program:**

Interval	Hole Diameter	Csg Size	Wt.	Grade	Thread
0' – 600'	12 1/4"	9 5/8"	32 ppf	J-55	LTC
0' – 6200'	7 7/8"	5 1/2"	15.50 ppf	J-55	LTC
6200' – 7500'	7 7/8"	5 1/2"	17 ppf	J-55	LTC
7500' – 8150'	7 7/8"	5 1/2"	17 ppf	N-80	LTC

**Tubing Program:** 0 – 8100', 2 3/8", 4.7 ppf, J55, EUE

**BOPE and Wellhead Specifications and Testing:**

From surface casing shoe to TD: 9 5/8" 3000 psi threaded casing head with two 2" outlets. 11", 3000 psi double gate BOP and 3000 psi choke manifold (see figures 1 and 2). Pressure test BOPE to 3000 psi and 9 5/8" surface casing to 600 psi prior to drilling surface casing shoe.

For completion operations: 7" x 2 3/8", 3000 psi tree assembly. 7 1/16", 3000 psi double gate BOP system (see figure 3).

**General Operation:**

- Actuate pipe rams once each day during drilling operations. Actuate blind rams once each trip.
- An upper Kelly cock valve, with handle, will be available on the rig floor to fit each drilling string.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in the daily drilling report.
- Blind and pipe rams will be equipped with extension hand wheels.

**Cementing Program:**

9 5/8" Surface Casing String: Run casing with saw tooth guide shoe on bottom, insert float valve one joint from bottom, and install bowspring centralizers as per Onshore Order #2. Cement with 350 sks class 'G' with 1/4 #/sk flocele and 3% CaCl<sub>2</sub> (413 cf slurry, 100% excess to circulate to surface).

5 1/2" Production Casing String: Run casing with float shoe on bottom, float collar one joint from bottom and centralizers every other joint from TD to 3700'. Install stage collars at 5800' and 3800'. Cement in three stages. Stage 1 (8225' – 5800'); 350 sks class 'G' 50/50 poz with, 2% gel, 1/4 #/sk flocele, 5 #/sk gilsonite. Stage 2 (5800' – 3800'); 400 sks class 'G' 50/50 poz with 2% gel, 1/4 #/sk flocele, 5 #/sk gilsonite. Stage 3 (4100' – 0'); 670 sks class 'G' 50/50 poz with 2% CaCl<sub>2</sub>, 6% gel, 1/4 #/sk flocele, 5 #/sk gilsonite. Precise slurry volumes to be calculated from open hole log caliper plug 25% excess. Top of cement to be at surface.

### **Special Drilling Operations:**

No special operations are anticipated

### **Additional Information:**

- This well is to be completed in the Gallup and Dakota formations.
- No abnormal temperature or pressure, or other hazards are anticipated.
- LCM will be added to the mud system as required to maintain circulation.
- Estimated formation pressures:
  - Fruitland Coal            300 psi
  - Pictured Cliffs           300 psi
  - Mesa Verde               600 psi
  - Gallup                     650 psi
  - Dakota                    800 psi

### **Completion Information:**

The completion procedure will be prepared after open hole logs are analyzed. The well will probably be completed by hydraulic frac in two to three stages.

Prepared by: Robert R. Griffie  
Operations Engineer  
Date: 06/07/01

## Bishop Federal 25-2 Drilling and Completion AFE

page 1

Description: 8150' Gallup/Dakota test. Assumes standard drilling rig is utilized.

AFE assumes completion in both the Gallup and Dakota formations with a two stage frac.

Prepared by: R. Griffie

## Dry Hole Cost

Cost Item Code	Description	Intangible	Tangible	Total
<b>Preparation</b>				
101 Permitting	permitting, survey, and archaeology	\$10,000.00		\$10,000.00
102 Dirtwork	blading, location preparation, anchors	\$5,500.00		\$5,500.00
103 Reclamation	dirtwork, water disposal	\$1,500.00		\$1,500.00
<b>Drilling Rig Costs</b>				
110 Rig Mobilization		\$25,000.00		\$25,000.00
111 Daywork Drilling Cost	10 days @ \$7500 per day	\$75,000.00		\$75,000.00
112 Footage Drilling Cost				
113 Turnkey Drilling Cost				
<b>Drilling Equipment</b>				
120 Drilling Bits		\$15,000.00		\$15,000.00
121 Drilling Tools	reamers, stabilizers, rental drill pipe, etc.			
122 Rental Equipment		\$1,600.00		\$1,600.00
<b>Services</b>				
133 Trucking	hauling pipe & materials, hot shot services	\$10,000.00		\$10,000.00
134 Water	water cost and hauling charges	\$25,000.00		\$25,000.00
135 Fuel	drilling contractor to provide			
136 Mud	mud, chemicals, soap, etc.	\$5,500.00		\$5,500.00
137 Air Drilling Services				
138 Directional Services				
139 Fishing Services				
140 Safety Services	H2S monitoring, etc.			
141 Wireline Services				
142 Contract Labor	roustabout services, casing crews, welders, etc.	\$10,000.00		\$10,000.00
143 Inspection Services				
144 Down-hole Tools				
148 Other Services				
<b>Cementing</b>				
150 Primary Cementing	surface casing	\$3,500.00		\$3,500.00
151 P&A Cementing		\$5,100.00		\$5,100.00
152 Remedial Cementing				
<b>Design and Supervision</b>				
160 Engineering/Geology Design				
161 Field Supervision		\$8,000.00		\$8,000.00
162 Operator Overhead				
163 Outside Operated Overhead				
<b>Formation Evaluation</b>				
170 Open Hole Logging		\$30,000.00		\$30,000.00
171 Drill Stem Testing				
172 Coring	coring, and core analysis			
173 Mud Logging				
174 Field Geologist				
175 Flow Testing				
176 Laboratory Services				
<b>Tangible Items</b>				
180 Conductor Casing				
181 Surface Casing	600', 9 5/8", 32 ppf, J55 @ \$8.71/ft		\$7,680.00	\$7,680.00
182 Intermediate Casing				
183 Intermediate Casing				
184 Float Equipment	shoe, DV collar, centralizers, etc.		\$1,150.00	\$1,150.00
185 Casing Tools	liner hanger, etc.			
186 Pipe Inspection	casing and tubing strings			
187 Well Head Equipment			\$1,500.00	\$1,500.00
<b>Miscellaneous</b>				
190				
<b>Total Dry Hole Cost</b>		<b>\$230,700.00</b>	<b>\$10,330.00</b>	<b>\$241,030.00</b>

Completion Costs		page 2		
Cost to run Production Casing and complete with two stage frac in both the Gallup and Dakota				
prepared by: R. Griffie				
Cost Item Code	Description	Intangible	Tangible	Total
Preparation				
201 Permitting				
202 Dirtwork	blading, location preparation, anchors	\$1,500.00		\$1,500.00
203 Reclamation	dirtwork, water disposal			
Completion Rig Costs				
210 Rig Mobilization		\$2,800.00		\$2,800.00
211 Hourly or Daily Cost		\$25,680.00		\$25,680.00
212 Expendables	swab cups, line, etc.	\$1,800.00		\$1,800.00
213				
Workover Equipment				
220 Bits and Mills		\$650.00		\$650.00
221 Workover tools				
222 Rental Equipment		\$2,000.00		\$2,000.00
Services				
233 Trucking	hauling pipe & materials, hot shot services	\$14,500.00		\$14,500.00
234 Water	water cost and hauling charges	\$20,000.00		\$20,000.00
234 Fuel	for air drilling equipment			
236 Mud	mud, chemicals, soap, etc.			
237 Air Drilling Services				
238 Directional Services				
239 Fishing Services	fishing tools, etc. Mills			
240 Safety Services	H2S monitoring, etc.			\$0.00
241 Wireline Services	CBL, correlation, squeeze perforating, etc.	\$6,500.00		\$6,500.00
242 Contract Labor	roustabout services, casing crews, welders, etc.	\$2,500.00		\$2,500.00
243 Inspection Services				
244 Down-hole Tools	test packers, bridgeplugs, cement retainers	\$15,000.00		\$15,000.00
245 Stimulation Services	acidizing, frac, etc.	\$100,000.00		\$100,000.00
246 Misc Pumping Services	CO2, Nitrogen, etc.			
247 Hydrotesting Services				
248 Other Services				
Cementing				
250 Primary Cementing	cementing of new production string	\$45,000.00		\$45,000.00
251 P&A Cementing				
252 Remedial Cementing				
Design and Supervision				
260 Engineering/Geology Design				
261 Field Supervision		\$6,400.00		\$6,400.00
262 Operator Overhead				
263 Outside Operated Overhead				
Formation Evaluation				
270 Cased Hole Logging	for formation evaluation			
271 Drill Stem Testing				
272 Coring	coring, and core analysis			
273 Mud Logging				
274 Field Geologist				
275 Flow Testing	flow test, pressure build up, etc.			
276 Laboratory Services	gas, oil, & water analysis			
Tangible Items				
280 Production Casing	8150' of 5 1/2" 15.50 and 17 ppi casing		\$55,488.50	\$55,488.50
281 Tubing	8050' of 2 3/8" EUE		\$16,905.00	\$16,905.00
282 Tubing				
283 Tubing String equipment			\$1,100.00	\$1,100.00
284 Float Equipment	shoe, DV collar, centralizers, etc.		\$15,000.00	\$15,000.00
285 Casing Tools	liner hanger, etc.			
286 Pipe Inspection	casing and tubing strings			
287 Well Head Equipment			\$5,400.00	\$5,400.00
288 Permanent Packers	permanent production packers, bridgeplugs, etc.			
289 Miscellaneous Pipe and Fittings			\$1,500.00	\$1,500.00
Miscellaneous				
290				
Completion Cost Total		\$244,330.00	\$95,393.50	\$339,723.50

## Production Equipment

page 3

Costs to set Production Tanks, Separator, and prep location.  
Does not include pipeline or pumping unit costs

prepared by: R. Griffie

Cost Code	Item	Description	Intangible	Tangible	Total
<b>Tangible Items</b>					
501	Production Tanks			\$ 17,500.00	\$17,500.00
502	Flow Lines, Valves, and Fittings			\$ 5,000.00	\$5,000.00
503	Pumping Equipment - Surface	pumping unit			
504	Pumping Equipment - Downhole	rods, pump, etc			
505	Production Units	heater treater / separator		\$ 35,000.00	\$35,000.00
506	Metering Equipment				
507	Wellsite Compression				
508	Buildings				
509	Miscellaneous			\$ 5,000.00	\$5,000.00
<b>Installation and Construction</b>					
520	Contract Labor		\$ 20,000.00		\$20,000.00
<b>Production Equipment Total</b>			<b>\$ 20,000.00</b>	<b>\$ 62,500.00</b>	<b>\$ 82,500.00</b>

## AFE Summary

Cost Code	Item	Description	Intangible	Tangible	Total
	Dry Hole Cost		\$230,700.00	\$10,330.00	\$241,030.00
	less P&A Cementing Cost		-\$5,100.00	\$0.00	-\$5,100.00
	Completion Cost		\$244,330.00	\$95,393.50	\$339,723.50
	Production Equipment Cost		\$ 20,000.00	\$ 62,500.00	\$ 82,500.00
	<b>Total Estimated Well Cost</b>		<b>\$489,930.00</b>	<b>\$168,223.50</b>	<b>\$658,153.50</b>
	excluding pipeline and pumping unit				