



Weatherford

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

BOPCO, LP
PO Box 2760
Midland, TX 79702

Date: March 6, 2014

Attention: Jeremy Braden

30-015-41033

Re: BOPCO, LP
Well: Poker Lake Unit 421H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Benjamin Hernandez MWD Supervisor	421H	227 MD	2/4/2014	Measurement
		14116 MD	3/1/2014	While Drilling

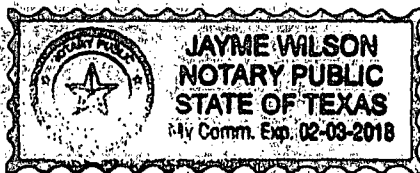
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesse Aguilar
MWD Ops Coordinator

On this, the 17th day of March, 2014, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public

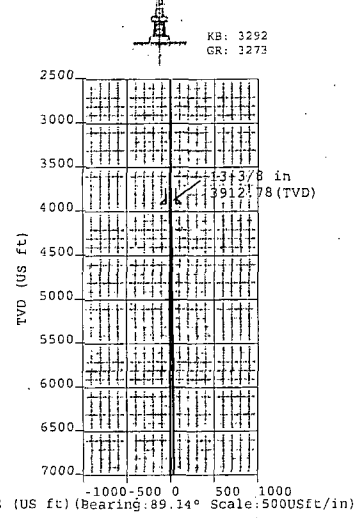


BOPCO, L.P.
Poker Lake Unit 421H
Eddy Co, NM

Plan Data for PLU 421H

Plan Point Information:

DogLeg	Severity	Unit	Inc	Az	TVD	N/S	E/W	Northing	Easting	VSec	DLS
(USft)	(%)	(%)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)	
13375.00	89.44	89.24	7759.40	98.40	6098.04	398837.00	651759.39	6098.83	4.84		
23397.09	89.96	89.64	7759.51	98.82	6120.13	398837.22	651761.48	6120.92	3.00		
14184.93	89.96	89.64	7760.00	103.50	6907.95	398842.10	652549.30	6906.73	0.00		



Plan Data for PLU 421H

Target Set Information:

Name: PLU 421H

Position offsets from Slot centre

Name	TVD	Elevation	N/S	E/W	Northing	Easting	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	
PBHL	7760.00	-4368.00	103.50	6907.95	398842.10	652549.30	Cuboid	
HB1 For Dwg	7667.00	-4375.00	-0.00	0.00	398738.60	645641.35	Cuboid	
HB2 For Dwg	7642.00	-4550.00	103.50	6907.95	398842.10	652549.30	Cuboid	

Plan Data for PLU 421H

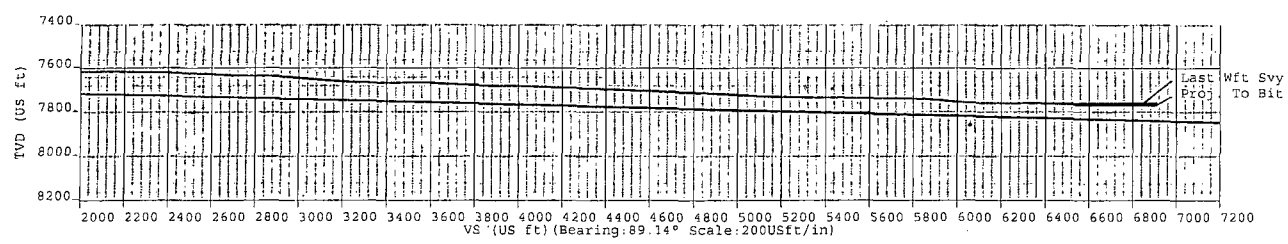
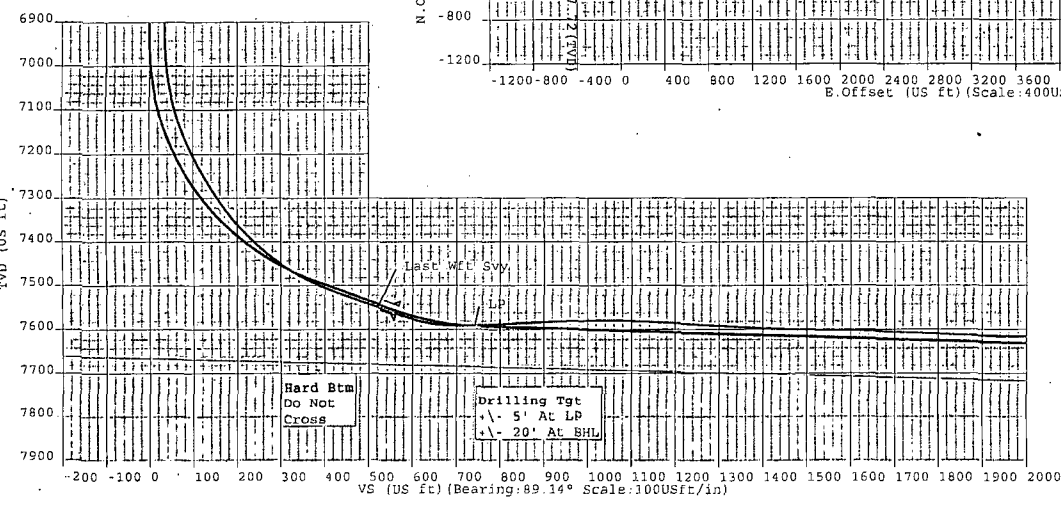
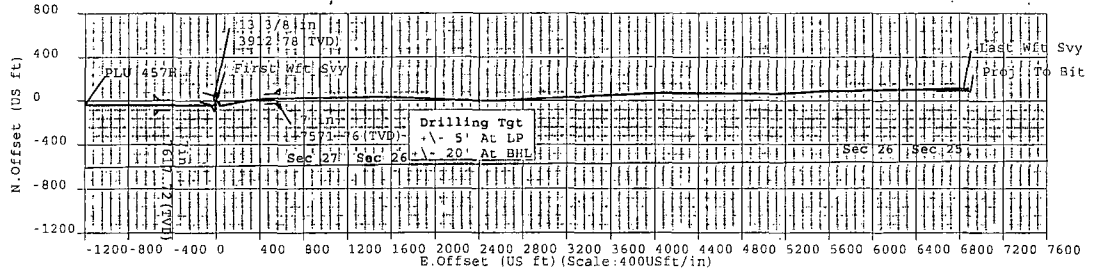
Slot: PLU 421H

Position:

Offset is from Site centre

-N/-S: 0.00USft Northing: 398738.60USft Latitude: 32°5'43.4"
 -E/-W: 0.00USft Easting: 645641.35USft Longitude: -103°51'46.9"
 Elevation Above VRD: 3273.00USft

- PLU 421H
- PLU 457H
- PLU 421H



Sign Off: Russell Joyner

5D Survey Report

BOPCO, L.P.

Field Name: *Eddy Co, NM Nad27 NMEZ*

Site Name: *Poker Lake Unit 421H*

Well Name: *PLU 421H*

Survey: *Wft Svy*

28 February 2014



Weatherford®

PLU 421H

Field Name Eddy Co, NM Nad27 NMEZ	Map Units : US ft	Company Name : BOPCO, L.P.
	Vertical Reference Datum (VRD) : Mean Sea Level	
	Projected Coordinate System : NAD27 / New Mexico East	
	Comment :	

Site Name Poker Lake Unit 421H	Units : US ft	North Reference : Grid	Convergence Angle : 0.25
	Position	Northing : 398738.60 US ft	Latitude : 32° 5' 43.35"
		Easting : 645641.35 US ft	Longitude : -103° 51' 46.91"
	Elevation above Mean Sea Level: 3273.00 US ft		
Comment :			

Slot Name PLU 421H	Position (Offsets relative to Site Centre)		
	+N / -S : 0.00 US ft	Northing : 398738.60 US ft	Latitude : 32° 5' 43.35"
	+E / -W : 0.00 US ft	Easting : 645641.35 US ft	Longitude : -103° 51' 46.91"
	Elevation above Mean Sea Level : 3273.00 US ft		
Comment :			

Well Name PLU 421H	Type : Main well	UWI :
	Rig Height Well TVD Reference : 19.00 US ft	Comment :
	Relative to Mean Sea Level: 3292.00 US ft	
	Closure Distance : 6907.62 US ft	Closure Azimuth : 89.079°
	Vertical Section (Position of Origin Relative to Slot)	
	+N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 89.14°	

Target Set

Name : PLU 421H **Number of Targets :** 3

Comment :

Target Name: PEHL	Position (Relative to Slot centre)		
	+N / -S : 103.50 US ft	Northing : 398842.10 US ft	Latitude : 32° 5' 44.07"
	+E / -W : 6907.95 US ft	Easting : 652549.30 US ft	Longitude : -103° 50' 26.60"
	TVD (Well TVD Reference) : 7760.00 US ft		
Shape: Cuboid	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft
Target Name: HB1 For Dwg	Position (Relative to Slot centre)		
	+N / -S : 0.00 US ft	Northing : 398738.60 US ft	Latitude : 32° 5' 43.35"
	+E / -W : 0.00 US ft	Easting : 645641.35 US ft	Longitude : -103° 51' 46.91"
	TVD (Well TVD Reference) : 7667.00 US ft		
Shape: Cuboid	Orientation Azimuth : 89.14°	Inclination : -1.45°	
	Dimensions Length : 13818.00 US ft	Breadth : 0.00 US ft	Height : 1.00 US ft

SD Survey Report

Target Name: HB2 For dwg	Position (Relative to Slot centre): +N / -S : 103.50 US ft Northing : 398842.10 US ft Latitude : 32°5'44.07" +E / -W : 6907.95 US ft Easting : 652549.30 US ft Longitude : -103°50'26.60"		
Shape: Cuboid	TVD (Well TVD Reference) : 7842.00 US ft		
	Orientation Azimuth : 89.14°	Inclination : -1.45°	
	Dimensions Length : 13818.00 US ft	Breadth : 0.00 US ft	Height : 1.00 US ft

Survey Name (Wft Svy)

Date : 06/Feb/2014 **Survey Tool :** MWD **Comment :** **Company :**

Magnetic Model

Model Name: BGGM **Date:** 15/Mar/2014 **Field Strength:** **Declination:** 7.49° **Dip:** 59.93°
48233.7 nT

Tie Point
MD: 0 **Inclination:** 0 **Azimuth:** 0 **TVD:** 0 **North Offset:** 0 **East Offset:** 0

Casing Points (Relative to Slot centre, TVD relative to Well TVD Reference)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
3913.00	0.25	105.41	3912.78	-5.94	6.65	398732.66	645648.00	13 3/8 in

Well path created using minimum curvature

Survey Points (Relative to Slot centre, TVD relative to Well TVD Reference)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	398738.60	645641.35	
227.00	0.66	88.44	226.99	0.04	1.31	1.31	0.29	398738.64	645642.66	First Wft Svy
469.00	0.41	277.23	468.99	0.18	1.84	1.84	0.44	398738.78	645643.19	
701.00	0.64	278.37	700.98	0.48	-0.26	-0.26	0.10	398739.08	645641.09	
1002.00	0.11	32.25	1001.97	0.96	-1.78	-1.76	0.23	398739.56	645639.57	Csg Pt
1035.00	0.16	55.89	1034.97	1.01	-1.72	-1.71	0.23	398739.61	645639.63	
1259.00	0.22	287.06	1258.97	1.31	-1.88	-1.86	0.15	398739.91	645639.47	
1480.00	0.31	328.10	1479.97	1.94	-2.60	-2.57	0.09	398740.54	645638.75	
1702.00	0.16	307.53	1701.97	2.64	-3.16	-3.12	0.08	398741.24	645638.19	
1924.00	0.14	346.14	1923.97	3.09	-3.47	-3.42	0.05	398741.69	645637.88	
2145.00	0.35	103.81	2144.97	3.19	-2.88	-2.83	0.20	398741.79	645638.47	
2367.00	0.30	74.01	2366.96	3.19	-1.66	-1.62	0.08	398741.79	645639.69	
2588.00	0.21	28.01	2587.96	3.71	-0.92	-0.86	0.10	398742.31	645640.43	
2810.00	0.41	300.16	2809.96	4.47	-1.41	-1.35	0.20	398743.07	645639.94	
3031.00	0.63	282.97	3030.95	5.14	-3.28	-3.20	0.12	398743.74	645638.07	
3253.00	1.66	135.83	3252.93	3.10	-2.23	-2.18	1.00	398741.70	645639.12	
3475.00	0.91	131.81	3474.87	-0.38	1.33	1.32	0.34	398738.22	645642.68	
3697.00	1.74	139.05	3696.81	-4.10	4.85	4.79	0.38	398734.50	645646.20	
3847.00	0.10	115.03	3846.78	-5.87	6.46	6.37	1.10	398732.73	645647.81	
3913.00	0.25	105.41	3912.78	-5.94	6.65	6.56	0.23	398732.66	645648.00	13 3/8 in
4067.00	0.60	101.68	4066.78	-6.19	7.76	7.67	0.23	398732.41	645649.11	
4288.00	0.95	104.75	4287.76	-6.89	10.67	10.56	0.16	398731.71	645652.02	
4535.00	0.77	106.42	4534.73	-7.88	14.24	14.12	0.07	398730.72	645655.59	
4785.00	0.76	115.13	4784.71	-9.06	17.35	17.21	0.05	398729.54	645658.70	
5035.00	0.85	133.36	5034.68	-11.04	20.20	20.03	0.11	398727.56	645661.55	
5284.00	0.84	133.85	5283.66	-13.57	22.86	22.65	0.00	398725.03	645664.21	
5534.00	1.15	135.46	5533.62	-16.63	25.94	25.69	0.12	398721.97	645667.29	
5784.00	0.98	159.88	5783.58	-20.42	28.44	28.13	0.19	398718.18	645669.79	
6007.00	1.09	170.66	6006.54	-24.30	29.44	29.07	0.10	398714.30	645670.79	
6227.00	1.13	163.52	6226.50	-28.45	30.39	29.96	0.07	398710.15	645671.74	
6477.00	1.41	164.81	6476.44	-33.78	31.90	31.39	0.11	398704.82	645673.25	
6727.00	1.16	157.34	6726.37	-39.09	33.68	33.09	0.12	398699.51	645675.03	
6895.00	1.35	157.16	6894.33	-42.48	35.10	34.46	0.11	398696.12	645676.45	

5D Survey Report

Survey Points (Relative to Slot centre, TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
6926.00	1.35	163.92	6925.32	-43.17	35.34	34.69	0.51	398695.43	645676.69	
6958.00	1.97	125.34	6957.31	-43.85	35.90	35.23	3.88	398694.75	645677.25	
6988.00	4.20	99.77	6987.27	-44.33	37.40	36.73	8.56	398694.27	645678.75	
7019.00	7.34	90.42	7018.11	-44.54	40.50	39.83	10.54	398694.06	645681.85	
7051.00	10.57	84.42	7049.71	-44.27	45.47	44.80	10.49	398694.33	645686.82	
7081.00	13.87	83.74	7079.03	-43.61	51.78	51.12	11.01	398694.99	645693.13	
7111.00	16.94	83.48	7107.95	-42.72	59.70	59.05	10.24	398695.88	645701.05	
7142.00	20.77	82.85	7137.28	-41.52	69.64	69.01	12.37	398697.08	645710.99	
7174.00	23.47	80.81	7166.92	-39.80	81.57	80.96	8.77	398698.80	645722.92	
7205.00	26.24	78.89	7195.05	-37.49	94.39	93.81	9.31	398701.11	645735.74	
7237.00	28.30	77.77	7223.49	-34.52	108.74	108.21	6.63	398704.08	645750.09	
7268.00	30.89	77.68	7250.44	-31.27	123.70	123.22	8.36	398707.33	645765.05	
7300.00	32.98	78.10	7277.60	-27.72	140.25	139.82	6.57	398710.88	645781.60	
7331.00	33.71	78.81	7303.50	-24.31	156.95	156.56	2.67	398714.29	645798.30	
7363.00	37.08	78.94	7329.58	-20.73	175.13	174.80	10.53	398717.87	645816.48	
7394.00	40.45	79.60	7353.75	-17.12	194.20	193.92	10.95	398721.48	645835.55	
7425.00	43.64	80.09	7376.76	-13.47	214.63	214.41	10.34	398725.13	645855.98	
7456.00	46.25	80.10	7398.70	-9.70	236.20	236.03	8.42	398728.90	645877.55	
7486.00	49.09	79.90	7418.90	-5.85	258.04	257.93	9.48	398732.75	645899.39	
7518.00	52.89	81.00	7439.04	-1.73	282.56	282.50	12.17	398736.87	645923.91	
7550.00	56.54	81.39	7457.52	2.27	308.37	308.37	11.45	398740.87	645949.72	
7580.00	59.72	83.47	7473.36	5.61	333.62	333.67	12.12	398744.21	645974.97	
7611.00	63.21	83.58	7488.17	8.68	360.68	360.77	11.26	398747.28	646002.03	
7643.00	66.29	84.90	7501.82	11.58	389.47	389.60	10.32	398750.18	646030.82	
7674.00	69.65	86.70	7513.45	13.68	418.12	418.28	12.10	398752.28	646059.47	
7705.00	70.24	88.09	7524.08	15.01	447.21	447.39	4.62	398753.61	646088.56	
7736.00	70.55	88.25	7534.48	15.94	476.40	476.59	1.11	398754.54	646117.75	
7767.00	70.50	88.40	7544.81	16.79	505.61	505.81	0.48	398755.39	646146.96	
7783.00	70.68	88.42	7550.13	17.21	520.70	520.90	1.13	398755.81	646162.05	
7858.00	71.77	87.64	7574.27	19.65	591.66	591.89	1.76	398758.25	646233.01	
7888.00	76.24	87.58	7582.53	20.86	620.47	620.71	14.90	398759.46	646261.82	
7919.00	81.51	87.31	7588.51	22.21	650.85	651.11	17.02	398760.81	646292.20	
7950.00	87.34	87.74	7591.52	23.54	681.66	681.94	18.86	398762.14	646323.01	
8011.00	92.87	88.38	7591.41	25.61	742.60	742.90	9.13	398764.21	646383.95	
8103.00	92.66	89.45	7586.97	27.35	834.47	834.79	1.18	398765.95	646475.82	
8196.00	92.24	89.64	7583.00	28.09	927.39	927.70	0.50	398766.69	646568.74	
8286.00	91.33	89.92	7580.20	28.43	1017.34	1017.65	1.06	398767.03	646658.69	
8377.00	86.99	89.47	7581.53	28.92	1108.31	1108.62	4.79	398767.52	646749.66	
8468.00	86.92	89.29	7586.36	29.90	1199.17	1199.49	0.21	398768.50	646840.52	
8559.00	86.08	88.72	7591.92	31.48	1289.99	1290.32	1.11	398770.08	646931.34	
8651.00	87.20	89.11	7597.31	33.21	1381.81	1382.16	1.29	398771.81	647023.16	
8743.00	88.81	89.83	7600.51	34.07	1473.75	1474.10	1.92	398772.67	647115.10	
8834.00	89.65	91.68	7601.74	32.87	1564.73	1565.05	2.23	398771.47	647206.08	
8925.00	87.69	92.26	7603.85	29.74	1655.65	1655.91	2.25	398768.34	647297.00	
9018.00	87.27	93.00	7607.94	25.48	1748.46	1748.64	0.91	398764.08	647389.81	
9111.00	87.41	92.75	7612.25	20.82	1841.24	1841.34	0.31	398759.42	647482.59	
9204.00	88.32	91.85	7615.72	17.09	1934.10	1934.14	1.38	398755.69	647575.45	
9296.00	90.91	94.12	7616.34	12.30	2025.96	2025.91	3.74	398750.90	647667.31	
9391.00	89.79	93.07	7615.76	6.34	2120.77	2120.62	1.62	398744.94	647762.12	
9486.00	87.69	90.60	7617.85	3.30	2215.68	2215.48	3.41	398741.90	647857.03	
9581.00	90.35	91.47	7619.47	1.58	2310.64	2310.41	2.95	398740.18	647951.99	
9676.00	87.34	89.38	7621.38	0.88	2405.60	2405.35	3.86	398739.48	648046.95	
9770.00	88.74	91.09	7624.60	0.49	2499.54	2499.27	2.35	398739.09	648140.89	
9865.00	86.57	88.89	7628.49	0.51	2594.45	2594.17	3.25	398739.11	648235.80	
9960.00	87.13	87.25	7633.71	3.70	2689.25	2689.00	1.82	398742.30	648330.60	
10054.00	89.79	85.94	7636.23	9.28	2783.04	2782.87	3.15	398747.88	648424.39	
10149.00	88.60	88.19	7637.57	14.15	2877.90	2877.79	2.68	398752.75	648519.25	
10244.00	85.03	87.28	7642.85	17.89	2972.66	2972.60	3.88	398756.49	648614.01	
10339.00	85.10	87.50	7651.02	22.20	3067.21	3067.20	0.24	398760.80	648708.56	

5D Survey Report

Survey Points (Relative to Slot centre, TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
10434.00	85.73	87.54	7658.61	26.30	3161.82	3161.86	0.66	398764.90	648803.17	
10529.00	86.99	86.89	7664.64	30.91	3256.51	3256.61	1.49	398769.51	648897.86	
10624.00	89.44	84.61	7667.60	37.94	3351.19	3351.38	3.52	398776.54	648992.54	
10719.00	90.63	85.65	7667.55	46.01	3445.85	3446.15	1.66	398784.61	649087.20	
10813.00	89.93	88.05	7667.09	51.17	3539.69	3540.06	2.66	398789.77	649181.04	
10908.00	86.43	88.64	7670.10	53.92	3634.59	3634.99	3.74	398792.52	649275.94	
11003.00	86.85	88.60	7675.67	56.20	3729.40	3729.82	0.44	398794.80	649370.75	
11097.00	87.76	87.69	7680.09	59.24	3823.25	3823.70	1.37	398797.84	649464.60	
11192.00	90.07	86.49	7681.89	64.06	3918.10	3918.62	2.74	398802.66	649559.45	
11286.00	88.32	88.18	7683.21	68.43	4011.98	4012.56	2.59	398807.03	649653.33	
11381.00	87.06	90.20	7687.04	69.77	4106.89	4107.47	2.50	398808.37	649748.24	
11476.00	89.16	89.89	7690.17	69.70	4201.83	4202.40	2.23	398808.30	649843.18	
11571.00	87.34	90.71	7693.07	69.20	4296.78	4297.33	2.10	398807.80	649938.13	
11665.00	88.46	90.29	7696.52	68.38	4390.71	4391.24	1.27	398806.98	650032.06	
11760.00	86.64	90.44	7700.58	67.78	4485.62	4486.13	1.92	398806.38	650126.97	
11855.00	88.39	90.88	7704.70	66.69	4580.52	4581.00	1.90	398805.29	650221.87	
11950.00	86.92	90.80	7708.58	65.29	4675.43	4675.88	1.55	398803.89	650316.78	
12045.00	89.09	89.99	7711.89	64.64	4770.36	4770.79	2.44	398803.24	650411.71	
12139.00	86.85	90.61	7715.22	64.15	4864.29	4864.71	2.47	398802.75	650505.64	
12234.00	86.43	90.30	7720.79	63.40	4959.13	4959.52	0.55	398802.00	650600.48	
12329.00	86.64	90.29	7726.53	62.91	5053.95	5054.33	0.22	398801.51	650695.30	
12425.00	88.60	88.22	7730.52	64.16	5149.85	5150.23	2.97	398802.76	650791.20	
12520.00	88.95	86.97	7732.55	68.14	5244.74	5245.18	1.37	398806.74	650886.09	
12614.00	88.53	86.49	7734.62	73.50	5338.57	5339.07	0.68	398812.10	650979.92	
12710.00	90.49	85.26	7735.44	80.41	5434.31	5434.90	2.41	398819.01	651075.66	
12805.00	87.69	87.49	7736.95	86.41	5529.09	5529.77	3.77	398825.01	651170.44	
12900.00	91.33	89.92	7737.76	88.56	5624.04	5624.74	4.61	398827.16	651265.39	
12995.00	88.04	90.66	7738.28	88.08	5719.02	5719.70	3.55	398826.68	651360.37	
13090.00	89.58	88.67	7740.25	88.63	5813.99	5814.67	2.65	398827.23	651455.34	
13185.00	83.90	87.19	7745.65	92.05	5908.74	5909.45	6.18	398830.65	651550.09	
13280.00	85.03	87.94	7754.82	96.07	6003.21	6003.97	1.43	398834.67	651644.56	
13375.00	89.44	89.24	7759.40	98.40	6098.04	6098.83	4.84	398837.00	651739.39	
13471.00	89.02	89.15	7760.69	99.75	6194.02	6194.82	0.45	398838.35	651835.37	
13566.00	90.77	89.57	7760.86	100.81	6289.01	6289.82	1.89	398839.41	651930.36	
13661.00	87.90	89.26	7761.97	101.78	6383.99	6384.80	3.04	398840.38	652025.34	
13756.00	88.18	88.49	7765.21	103.65	6478.92	6479.74	0.86	398842.25	652120.27	
13851.00	87.90	88.76	7768.46	105.92	6573.83	6574.68	0.41	398844.52	652215.18	
13945.00	89.58	88.49	7770.53	108.18	6667.78	6668.65	1.81	398846.78	652309.13	
14040.00	90.63	88.48	7770.36	110.69	6762.75	6763.65	1.11	398849.29	652404.10	
14116.00	89.16	90.36	7770.50	111.46	6838.74	6839.64	3.14	398850.06	652480.09	Last Wft Svy
14184.00	89.16	90.36	7771.49	111.03	6906.73	6907.62	0.00	398849.63	652548.08	Proj. To Bit