State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order IPI-406-B
March 8, 2016
Administrative Application Reference No. pMAM1605554520

Mr. David Alvarado
SENM Distict Fluids Manager
Basic Energy Services, LP
801 Cherry Street
Ft. Worth, TX 76102

RE: **Injection Pressure Increase**
UIC Class II Disposal Well
SWD; Delaware Pool (96100)

Dear Sir:

Reference is made to your request on behalf of Basic Energy Services, LP (OGRID 246368) received on February 24, 2016, to increase the maximum allowed surface tubing pressure (in pounds per square inch (psi)) on the following well to 1135 psi:

Well No.	API Number	UL-S-T-R	Injection Authority	Existing Pressure Limit (psi)	Existing Tubing OD (in)
Belco No. 2	30-015-25433	F-20-23S-28E	Administrative Orders: SWD-1292 and IPI-406-A	**880**	2⅞

Division reviewed the recent step rate test (SRT) results dated December 15, 2015. Analysis of the SRT results for the December 15, 2015 suggest that an increase in pressure is **not warranted**. The test was invalid; the well appears to have broken down, and a formation parting pressure cannot be conclusively determined from the test.

If the Applicant still wishes to pursue a higher pressure, the Applicant shall submit a plan for the new SRT to the Engineering Bureau. Further, the Applicant shall run a new MIT prior to the SRT, and another MIT after the test.

Based on the March 2, 2016 e-mail the Applicant's surface pressure is **1000 psi**. The maximum approved surface pressure is **880 psi, based on Administrative Order IPI-406-A.** If Applicant continues to inject above the approved injection pressure, the OCD shall have the right to seek a compliance order.

The Division Director retains the right to require at any time wireline verification of internal plugs below perfs, perfs, and packer setting depths in the well(s). This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 19.15.5.9 NMAC.

The Division Director may rescind any injection permit if it becomes apparent that the injected fluid is not being confined to the permitted disposal interval or is endangering any fresh water aquifer.

Sincerely,

David R. Catanach

DAVID R. CATANACH
Director

DRC/mam

enclosure: IPI-406-A
March 2, 2016 e-mail

cc: Oil Conservation Division – Artesia District Office
Well File API 30-015-25433
SWD - 1292

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Tony Delfin
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division

Administrative Order IPI-406-A
January 27, 2016
Administrative Application Reference No. pTGW1123748737
Administrative Application Reference No. pWVJ1530032978
Administrative Application Reference No. pPRG1602733983

Mr. David Alvarado
SENM Distict Fluids Manager
Basic Energy Services, LP
801 Cherry Street
Ft. Worth, TX 76102

RE: **Injection Pressure Increase; Correction of Order**
UIC Class II Disposal Well
SWD; Delaware Pool (96100)

Dear Sir:

Reference is made to your request on behalf of Basic Energy Services, LP (OGRID 246368) received on January 7, 2016, to increase the maximum allowed surface tubing pressure (in pounds per square inch (psi)) on the following well(s):

Well No.	API Number	UL-S-T-R	Injection Authority	Existing Pressure Limit (psi)	Existing Tubing OD (in)
Belco No. 2	30-015-25433	F-20-23S-28E	Administrative Orders: SWD-1292 and IPI-406	1056	2⅞

Division reviewed the recent step rate test (SRT) results dated December 15, 2015, and the previous SRT results dated August 11, 2011, submitted in the application which supported the approval of administrative order IPI-406. Analysis of the SRT results for order IPI-406 found that the vendor improperly plotted the results which Division used in approving the pressure increase. Therefore, Division is correcting the approved injection pressure for this well as to prevent any additional fracturing of the formation and, possibly, the confining strata.

Based on the results of the previously submitted step rate injection test(s), the following shall be the new maximum surface pressure limit(s) while equipped with **injection** tubing:

Well No.	Step Rate Test Date	New Pressure Limit (psi)	While Injecting	Injection Interval (ft)	Pressure Gradient (psi/ft)
Belco No. 2	8/11/2011	**880**	water	2540 to 3680	0.35

This approval is based on the provision that the tubing size, packer setting depth and completion interval for the well(s) does not change. Any future requested pressure increase will require resubmission of additional data and/or a new step-rate test. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in the well(s). This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 19.15.5.9 NMAC.

The previous pressure increase, approved in administrative order IPI-406 dated September 19, 2011, is hereby rescinded with the approval of this order.

The Division Director may rescind any injection permit if it becomes apparent that the injected fluid is not being confined to the permitted disposal interval or is endangering any fresh water aquifer.

Sincerely,

David R. Catanach

DAVID R. CATANACH
Director

DRC/prg

cc: Oil Conservation Division – Artesia District Office
State Land Office - Oil, Gas, and Minerals Division
Well File API 30-015-25433

McMillan, Michael, EMNRD

From: Alvarado, David <David.Alvarado@basicenergyservices.com>
Sent: Wednesday, March 02, 2016 11:51 AM
To: McMillan, Michael, EMNRD
Subject: RE: Belco Well No. 2 IPI.

Yes sir I am in Midland at a PBU meeting it will be in the morning Mike.
I also was told that the well current PSI at the Belco 2 is 1000 PSI respectively.

Sent via the Samsung GALAXY S® 5, an AT&T 4G LTE smartphone

-------- Original message --------
From: "McMillan, Michael, EMNRD" <Michael.McMillan@state.nm.us>
Date: 3/2/2016 12:22 PM (GMT-06:00)
To: "Alvarado, David" <David.Alvarado@basicenergyservices.com>
Cc: "Jones, William V, EMNRD" <WilliamV.Jones@state.nm.us>, "Goetze, Phillip, EMNRD" <Phillip.Goetze@state.nm.us>, "Lowe, Leonard, EMNRD" <Leonard.Lowe@state.nm.us>
Subject: RE: Belco Well No. 2 IPI.

David:
Can you provide the raw data in a spreadsheet so we can further examine the data for the SRT?

Thank You

Michael A. McMillan
Engineering and Geological Services Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe NM 87505
O: 505.476.3448 F. 505.476.3462
Michael.mcmillan@state.nm.us

From: Alvarado, David [mailto:David.Alvarado@basicenergyservices.com]
Sent: Monday, February 29, 2016 4:25 PM
To: McMillan, Michael, EMNRD
Subject: RE: Belco Well No. 2 IPI.

Michael the well was shut in oct.

Sent via the Samsung GALAXY S® 5, an AT&T 4G LTE smartphone