#### WELL LOCATION CERTIFICATE: KEOWN STATE 19N2-34HZ SECTION 15, TOWNSHIP 2 NORTH, RANGE 68 WEST, 6TH P.M. 1/4 CORNER <u>O</u>F SHEET 2 MATCH LINE SHEET 1 OF SEC 10/SEC 15 2.5" ALUM. CAP 10/11 <u>9|10</u> PLS 11434 15|14 16|15 3.25" ALUM. CAP 3.25" ALUM. CAP N 89°57'11" E 2649.04 N 89°56'17" E 2649.88 PLS 29430 PLS 13155 SURFACE LOCATION GROUND ELEVATION=4872' 19 2667.0 LATITUDE= 40.141223° 63, 87 LONGITUDE = -104.995709° 2675.0 2659. HEEL LOCATION 1140' FNL LATITUDE= 40.08.28.403" Ш 1685' FWL LONGITUDE = -104'59'44.551" ≥ 7,20" 60, 00°21 HEEL LOCATION 00.25 NAD 8.3 00 N 52°16'31" E 1057' (GRID) LATITUDE = 40.142986° S LONGITUDE = -104.992704° N 52°36'04" E (TRUE) C1/4 CORNER KEOWN STATE 19N2-34HZ SECTION 15 LATITUDE= 40.08.34.749" SURFACE LOCATION 2" ALUM. CAP LONGITUDE= -104'59'33.735" PLS ILLEGIBLE 1/4 CORNER N 89°45'59" E N 89°46'29" E SEC 15/SEC 14 1/4 CORNER 3.25" ALUM. CAP SEC 16/SEC 15 N 89°46'47" E 1329.35 2652.21 1323.36 PLS 29430 2" ALUM. CAP C-E1/16 CORNER PLS 13446 Ш SECTION 15 2.5" ALUM. CAP PLS 17502 2660.61 BOTTOM HOLE LOCATION C-S1/16 CORNER SECTION 15 NAD 83 اعا 3.25" ALUM. CAP LATITUDE= 40.178982° 00.24'21" 00.17,11" LONGITUDE = -104.992405° PLS 22103 LATITUDE= 40°10'44.335" LONGITUDE = -104°59'32.658" 1/4 CORNER SEC 15/SEC 22 S 15/14 2.5" ALUM. CAP 16/15 22|23 PLS 18255 21/22 3.25" ALUM. CAP 2.5" ALUM. CAP S 89°47'51" W S 89°49'29" W 2655.14 2655.34 PLS 29430 PLS ILLEGIBLE SURVEYOR'S CERTIFICATION: I, hereby certify to KERR-McGEE OIL & GAS ONSHORE L.P., that this Well Location Certificate was prepared under my direct supervision and that the drawing accurately depicts the proposed location of the well. Mark A. Hall, PLS #36073 FOR AND ON BEHALF OF ACKLAM, INC. 1000 195 Telluride Street Suite 7 NOTES: Brighton CO 80601 SCALE: 1"=1000 Found Section Corner Calculated Section Corner 3. Basis of Elevations: NAVD88 (GEOID12). PREPARED FOR: WELL LOCATION CERTIFICATE 4. Basis of Bearings: Colorado coordinate system 1983 north zone ('GRID'). (II) Basis of Distances: GRID; Combined Factor=0.999725831 KEOWN STATE 19N2-34HZ GPS Operator: Monty Wallace PDOP 1.3 **KerrMcGee** See attachments for existing improvements within 500 feet of the well **SURFACE** 1786' FNL 845' FWL SEC. 15 Kerr-McGee Oll & **GROUND ELEVATION=4872'** Gas Onshore L.P. 8. Well footages are measured at right angles to the section lines. 1099 18th Street 9. The Bottom Hole Location bears N 03'30'49" E 13786' from the Surface Denver, Colorado 80202

1140' FNL 1685' FWL SEC. 15

1465' FSL 1661' FWL SEC. 34

**BOTTOM HOLE** 

SECTION 15, T2N, R68W, 6TH PM

WELD COUNTY, COLORADO

SW1/4 NW1/4

Acklam, Inc.

DATE SURVEYED: 06/22/2015

DATE DRAFTED: 08/18/2015

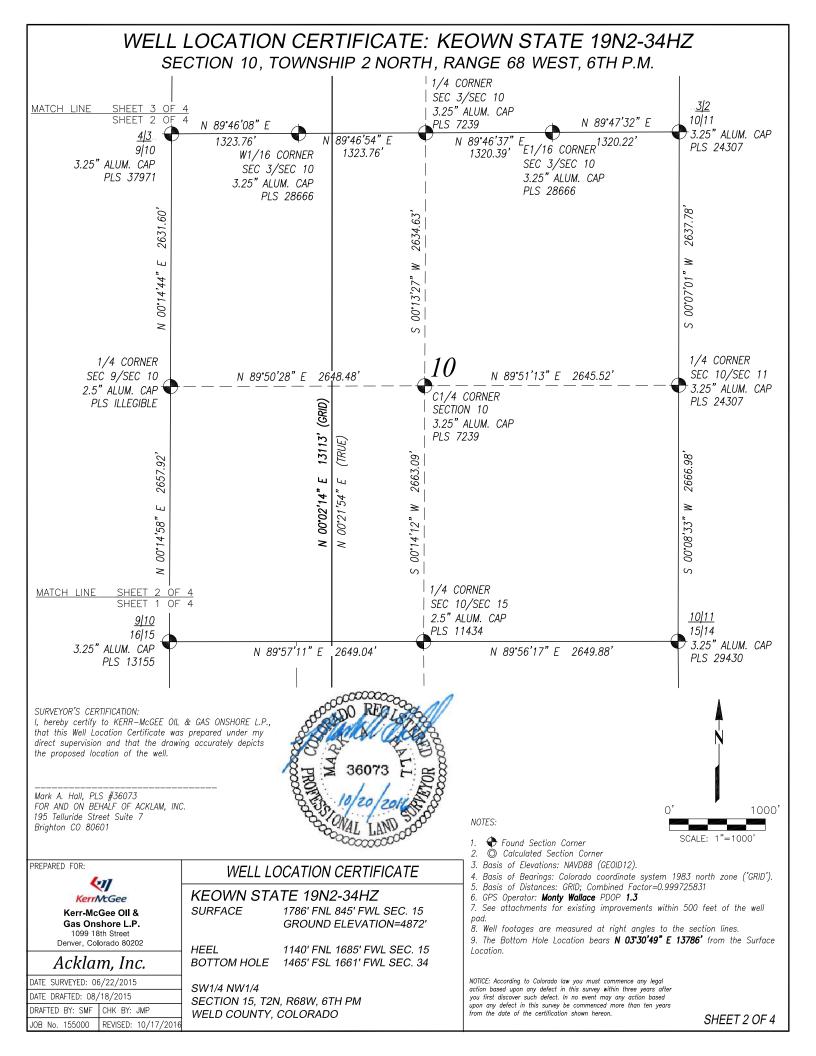
DRAFTED BY: SMF CHK BY: JMP

JOB No. 155000 REVISED: 10/17/2016

Location.

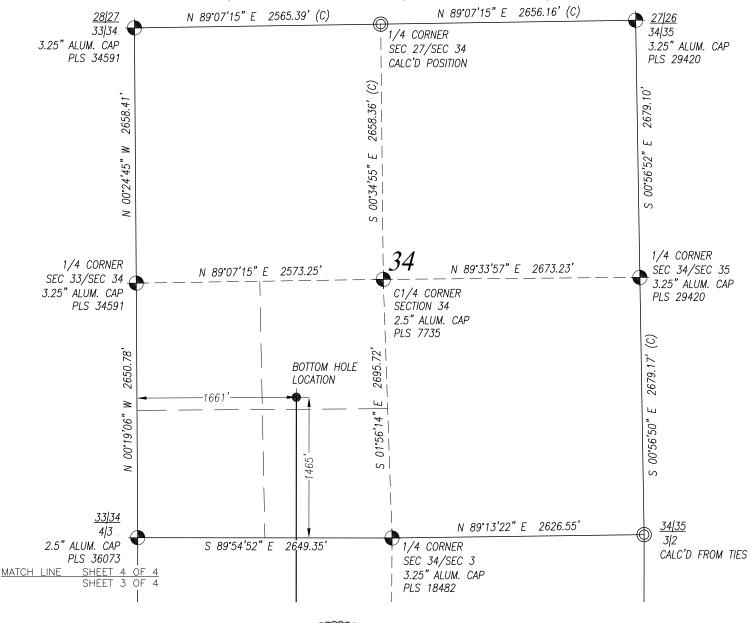
NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SHEET 1 OF 4



### WELL LOCATION CERTIFICATE: KEOWN STATE 19N2-34HZ SECTION 3, TOWNSHIP 2 NORTH, RANGE 68 WEST, 6TH P.M. <u>33|34</u> 34|35 N 89°13'22" E 2626.55' 4/3. 3/2 S 89°54'52" E 2.5" ALUM. CAP 2649.35 1/4 CORNER CALC'D FROM TIES PLS 36073 SEC 34/SEC 3 MATCH LINE SHEET 4 OF 3.25" ALUM. CAP SHEET 3 OF 4 PLS 18482 2566.06 ≥ ..80,20.00 00.02,16" 1/4 CORNER 1/4 CORNER N 89°19'28" E 2633.85' (C) N 89°19'28" E 2640.83' (C) SEC 3/SEC 2 SEC 4/SEC 3 3.25" ALUM. CAP 2.5" ALUM. CAP C1/4 CORNER (GRID) PLS 29420 PLS 28273 SECTION 3 CALC'D POSITION 13113' (TRUE) 9 2667.71 91 00°02'14" E 00"21"54" 00.07,57" 00,26,08" 1/4 CORNER SEC 3/SEC 10 3.25" ALUM. CAP 3/2 MATCH LINE SHEET 3 OF 10/11 SHEET 2 OF N 89°47'32" E PLS 7239 N 89°46'08" E 3.25" ALUM. CAP <u> 4|3</u>. 1323.76 89°46'54" N 89°46'37 E<sub>E1/16</sub> CORNER 1320.22 PLS 24307 9/10 W1/16 CORNER 1323.76 1320.39 3.25" ALUM. CAP SEC 3/SEC 10 SEC 3/SEC 10 PLS 37971 3.25" ALUM. CAP 3.25" ALUM. CAP PLS 28666 PLS 28666 SURVEYOR'S CERTIFICATION: I, hereby certify to KERR-McGEE OIL & GAS ONSHORE L.P., that this Well Location Certificate was prepared under my direct supervision and that the drawing accurately depicts the proposed location of the well. Mark A. Hall, PLS #36073 FOR AND ON BEHALF OF ACKLAM, INC. 1000 195 Telluride Street Suite 7 NOTES: Brighton CO 80601 SCALE: 1"=1000 Found Section Corner Calculated Section Corner 3. Basis of Elevations: NAVD88 (GEOID12). PREPARED FOR: WELL LOCATION CERTIFICATE 4. Basis of Bearings: Colorado coordinate system 1983 north zone ('GRID'). (II) Basis of Distances: GRID; Combined Factor=0.999725831 KEOWN STATE 19N2-34HZ GPS Operator: Monty Wallace PDOP 1.3 **KerrMcGee** See attachments for existing improvements within 500 feet of the well **SURFACE** 1786' FNL 845' FWL SEC. 15 Kerr-McGee Oll & GROUND ELEVATION=4872' Gas Onshore L.P. 8. Well footages are measured at right angles to the section lines. 1099 18th Street 9. The Bottom Hole Location bears N 03'30'49" E 13786' from the Surface Denver, Colorado 80202 1140' FNL 1685' FWL SEC. 15 Location. 1465' FSL 1661' FWL SEC. 34 Acklam, Inc. **BOTTOM HOLE** NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon. DATE SURVEYED: 06/22/2015 SW1/4 NW1/4 DATE DRAFTED: 08/18/2015 SECTION 15, T2N, R68W, 6TH PM DRAFTED BY: SMF CHK BY: JMP WELD COUNTY, COLORADO SHEET 3 OF 4 JOB No. 155000 REVISED: 10/17/2016

## WELL LOCATION CERTIFICATE: KEOWN STATE 19N2-34HZ SECTION 34, TOWNSHIP 3 NORTH, RANGE 68 WEST, 6TH P.M.



SURVEYOR'S CERTIFICATION:

PREPARED FOR:

I, hereby certify to KERR-McGEE OIL & GAS ONSHORE L.P., that this Well Location Certificate was prepared under my direct supervision and that the drawing accurately depicts the proposed location of the well.

Mark A. Hall, PLS #36073 FOR AND ON BEHALF OF ACKLAM, INC. 195 Telluride Street Suite 7 Brighton CO 80601



# WELL LOCATION CERTIFICATE



Kerr-McGee Oll & Gas Onshore L.P. 1099 18th Street Denver, Colorado 80202

## Acklam, Inc.

DATE SURVEYED: 06/22/2015 DATE DRAFTED: 08/18/2015 DRAFTED BY: SMF CHK BY: JMP

JOB No. 155000 REVISED: 10/17/2016

### KEOWN STATE 19N2-34HZ

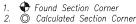
**SURFACE** 1786' FNL 845' FWL SEC. 15 **GROUND ELEVATION=4872'** 

1140' FNL 1685' FWL SEC. 15 BOTTOM HOLE 1465' FSL 1661' FWL SEC. 34

SW1/4 NW1/4

SECTION 15, T2N, R68W, 6TH PM WELD COUNTY, COLORADO





- 3. Basis of Elevations: NAVD88 (GEOID12).
- 4. Basis of Bearings: Colorado coordinate system 1983 north zone ('GRID'). Basis of Distances: GRID; Combined Factor=0.999725831
- GPS Operator: Monty Wallace PDOP 1.3
- See attachments for existing improvements within 500 feet of the well
- 8. Well footages are measured at right angles to the section lines.
- 9. The Bottom Hole Location bears N 03'30'49" E 13786' from the Surface Location.

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SHEET 4 OF 4

