

ABSTRACT

Problem of mining area border between two or more licensors of mining authority has a potency to obstruct operational activities which were caused by one of the problems, because of un-standard method of arrangement an area border of mining authority or un-referred on valid/recent regulation. Arrangement on area border by using geodetic method referred to a regulation is one of the ways to solve the problems. Scientifically a measurement will be always affected by un-accurate results, because of that, it is needed a planned and detail effort to minimize a minimum potential un-accurate results.

Arrangement an area border of mining authority KW.WSWD003 in Maniang Island has been done by: (1) measuring geodetic GPS with static positioning method tied with National Horizontal Control Network via point N1.4048 and its derivatives, (2) estimating the baseline parameters through calculate the minimum constraint least squares adjustment with a device LGO software, (3) staking out boundary points with the Total Station through polar methods, polygon open to correction Bowditch perfect bound, and Tachymetry method, (4) Piling a border signs in field were witnessed and agreed by stakeholders through signing on measurement and border piling sign on mining authority (IUPOP KW.WSWD003) agreement.

The result of this research shows that the boundary point IUPOP KW.WSWD003 is measurable and attached boundary markers have been connected to the National Horizontal Control Network with a reference of DGN 95. The sixteen points of thirty three points boundary markers are located on steep valleys, swamps, and sea. Those points are determined through reference markers installed on land with a flat reference azimuth and distance from the boundary pole reference to point (imaginary). The seventeen points which are located on land have been reviewed and checked and placed according to the recommendations of stakeholders and consideration of field refers to the decree of Kolaka's regent number 201 year 2010.

INTISARI

Sengketa batas wilayah pertambangan antara dua atau lebih pemegang Izin Usaha Pertambangan Operasi Produksi (IUPOP) berpotensi menghambat kegiatan operasional disebabkan salah satunya karena metode penataan batas wilayah yang tidak standar atau tidak mengacu pada regulasi yang berlaku. Penataan batas wilayah dengan metode *geodetic* mengacu pada regulasi adalah salah satu cara untuk menyelesaikan permasalahan tersebut. Secara alamiah suatu pengukuran akan selalu dipengaruhi oleh kesalahan-kesalahan sehingga diperlukan usaha yang terencana dan detil untuk membatasi pengaruh-pengaruh kesalahan tersebut sekecil mungkin.

Penataan batas wilayah IUPOP KW.WSWD003 di Pulau Maniang telah dilakukan melalui: (1) pengukuran GPS *geodetic* metode *static positioning* terikat dengan Jaring Kontrol Horisontal Nasional melalui titik N1.4048 dan turunannya, (2) estimasi parameter *baseline* melalui hitung kuadrat terkecil *minimum constraint adjustment* dengan perangkat lunak LGO, (3) *stakeout* titik batas dengan *Total Station* melalui metode polar, poligon terbuka terikat sempurna dengan koreksi Bowditch, dan metode Tachymetry, (4) pematokan tanda batas di lapangan disaksikan dan disetujui oleh *stakeholder* melalui penandatanganan berita acara pengukuran dan pematokan tanda batas wilayah IUPOP KW.WSWD003.

Hasil penelitian menunjukkan bahwa titik-titik batas wilayah IUPOP KW.WSWD003 terukur dan terpasang patok batas telah terikat dengan Jaring Kontrol Horisontal Nasional dengan referensi DGN 95. Dari tiga puluh tiga titik batas yang direncanakan pemasangan patok terdapat enam belas titik terletak di tebing curam, rawa-rawa, dan laut. Keenam belas titik tersebut ditentukan melalui patok referensi yang dipasang di darat dengan merujuk azimuth dan jarak datar dari patok referensi ke titik batas tersebut (khayal). Tujuh belas titik lainnya yang terletak di darat telah ditinjau dan diperiksa serta ditempatkan sesuai rekomendasi *stakeholder* dengan pertimbangan kondisi lapangan dan mengacu pada SK Bupati Kolaka No. 201 tahun 2010.

